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EARTH, WIND, and FIRE: ELEMENTAL PROPERTIES of ARMY and AIR FORCE COOPERATION in CLOSE AIR SUPPORT, 1945-1991

by

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The study examines how designing a force for the most-dangerous scenario affects the Air Force's ability to cooperate with the Army and conduct joint missions specifically CAS. Tomorrow's fight is unknown, but a near certainty is that it will be a joint fight and therefore it is imperative for the Air Force to foster inter-service cooperation. The path this paper treads is to understand how the Air Force derives its most-dangerous scenario and the implications or the effect on the joint team. The complete analysis revolved around a theoretical framework. The theory proposes that the services are motivated more by fear than potential gain, and they are particularly motivated by their greatest fears, expressed as the most-dangerous scenario. When a perceived crisis occurs, it reinforces the threat of the scenario and the Service's unique role in it, thereby entrenching the Service in patterns of behavior designed to protect the scenario and its role.

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ABSTRACT

The study examines how designing a force for the most-dangerous scenario affects the Air Force's ability to cooperate with the Army and conduct joint missions, specifically CAS. Tomorrow's fight is unknown, but a near certainty is that it will be a joint fight and therefore it is imperative for the Air Force to foster inter-service cooperation. The path this paper treads is to understand how the Air Force derives its most-dangerous scenario and the implications or the effect on the joint team. The complete analysis revolved around a theoretical framework. The theory proposes that the services are motivated more by fear than potential gain, and they are particularly motivated by their greatest fears, expressed as the "most-dangerous scenario." When a perceived crisis occurs, it reinforces the threat of the scenario and the Service's unique role in it, thereby entrenching the Service in patterns of behavior designed to protect the scenario and its role. When their greatest fears do not overlap, the Air Force and Army diverge from cooperative behavior, even to the point of neglecting joint missions, specifically CAS. The framework incorporated two organizational theories. They are Lina Svedin's *Organizational Cooperation in Crisis* and Dominic Johnson and Dominic Tierney's *Rubicon Theory of War*. The framework offers scaffolding necessary to hang the three historical case studies: Korea, Vietnam, and Desert Storm. The case studies focus on the three interwar year periods from 1945-1991. The interwar years were selected for two reasons. Today, as the drawdown from Afghanistan is completed, the US military is approaching an interwar period. The lessons from previous interwar periods may be applied early enough to forestall negative outcomes. Secondly, in times of war, political objectives and end states act as forcing functions that drive cooperation. This unified effort can be difficult to stimulate in peacetime void of common aims and the moral imperatives of combat.

This study concludes that an assessment of the strategic landscape and recognition of the moderating elements of war, political and public entities, must influence the design of the most dangerous-scenario. When the Services perceive a different strategic landscape and craft divergent views of future conflict, there is a desire to diverge from cooperation and engage in conflict with one another, tearing at the seams of trust. Willful and deliberate cooperation is all based on trust. Trust is the sinew that holds joint relationships together; without it the pressures of significant crises and even war can bend or break those relationships. The interwar years matter, not only to build and reconstitute the hardware necessary to fight, but to solidify the relationships vital to preserving American lives and national treasure when it comes time to fight.

TABLE OF CONTENT

Chapter 1

Introduction

The moment the Defense Department fiscal floodgates are either opened or closed "Fight's On" pours into the halls of the Pentagon and travels upstream to the Capitol Hill. Services are obliged to convince Congress why their programs are crucial to national security. On the surface the debate is awash with examining the logic of divesting or retaining platforms or weapon systems. This past year has been a prime example of this as news headlines have overflowed with stories discussing the Air Force's decision to retire the A-10 Thunderbolt II fleet. The impetus for this announcement was the mandatory budget cuts dictated by sequestration. This mandate was a severe slice to the Defense budget and continues to loom large; however, this is not the first time the military has faced draconian cuts. Following World War II, President Harry S. Truman cut two-thirds of the military budget from $42 billion to less than $14 billion, sparking intense debate on future force-structure requirements.[1] Changes of this magnitude pressure the Services to look beyond just the number of beans and bullets needed to constitute the force. Larger issues surface, requiring each Service to identify the assets necessary as well as their role in responding to the future security environment. For this reason, the passion behind each decision is not based on the Service's proclivity for its equipment, but for the belief it holds for the future of warfare and likely opponents to challenge the United States.

Watching the tough decisions made by each Service based on its view of force structure to combat perceived future threats, critics are quick to bring the Services to the mat. Today the Air Force in particular seems to be taking a significant number of blows. Questions arise such as, does divestiture from the A-10 mean the Air Force is taking steps to dissociate itself from the Close Air Support (CAS) mission? It is evident the discussion on aircraft is a springboard for the debate on the roles and missions the Service will participate in during future conflicts. Some have argued since the Air Force's inception, it has never truly embraced the CAS mission and ridding itself of the A-10 is another example of this. These critics are quick to cite historical evidence such

[1] Allen R. Millet and Peter Maslowski, *For the Common Defense: A Military History of the United States* (New York, New York: The Free Press, 1984), 501.

as the Air Force's reluctance in producing a dedicated CAS platform, the aversion to aircraft flying a *support* role as seen in command-and-control negotiations, and its dogmatic dedication to strategic-bombing theories. Others emerge suggesting it is not just CAS; the Air Force is solely fixed on fighting airpower-centric wars at the expense of its dedicated joint missions. Do these contentious accusations have merit?

Under the weight of intense budget cuts, and with the drawdown from Operation ENDURING FREEDOM (OEF) marking the close of nearly three decades of persistent air combat operations in the Middle East, the Air Force must reflect on prioritization of resources and missions. There are not enough funds to go around for every desired program, platform, or project. Finances are scarce and the future appears to become more and more uncertain, forcing difficult choices. To overcome this security environment, senior leaders are turning to grounding their decisions on past philosophies. Stepping back from the ropes, Air Force decision-makers answer the critics by stating, "You have an Air Force to fight and win the full-spectrum high-end fight."[2] In conjunction with this statement, Chief of Staff of the Air Force, General Mark Welsh III, reminds the public and the Service that the Air Force's five core missions have not changed since 1947.[3] He goes on to say that, although the way the Air Force does business has dramatically changed, the missions have not.[4] In line with the 1947 missions and directly addressing the challenges presented above, Gen Welsh strongly affirms, "Close air support will always be a key critical mission for the United States Air Force."[5] These statements at least cast doubt on the notion that the Air Force is attempting to rid itself of the CAS mission or that it is evading the joint missions it has so fervently contributed to for the last decade.

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[2] General Mark A. Welsh III, "Squaring the Circle: General Mark Welsh III on American Military Strategy in a Time of Declining Resources" (lecture, American Enterprise Institute, Washington, DC, 11 December 2013).
[3] Welsh III, "Squaring the Circle, (lecture, American Enterprise Institute, Washington, DC, 11 December 2013).
[4] Welsh III, "Squaring the Circle, (lecture, American Enterprise Institute, Washington, DC, 11 December 2013).
[5] General Mark A. Welsh III, "Press Briefing by Acting Secretary of the Air Force Eric Fanning and Air Force Chief of Staff General Mark A. Welsh III on the State of the Air Force in the Pentagon Briefing Room" (Presentation presented at the Pentagon Briefing Room, Arlington, VA, December 13, 2013).

There is an underlying predicament that emerges in committing to both the full-spectrum fight and all the joint-mission areas the Air Force participates in across the spectrum of conflict. The more focused the Air Force becomes on the full-spectrum, high-end fight, the less it can focus on the air forces that contribute directly to joint missions. This is not by design, but by the nature of the dilemma. The full-spectrum, high-end fight for the Air Force is air-centric. This fight is anticipated to be against a threat that would potentially limit the inclusion of ground forces, lowering the likelihood of a surface-centric effort. Even if naval forces were to participate in the high-end fight, the mission sets would be considered joint but they would not be inter-mixed. The Air Force and Navy would be able to carry on independently of one another in parallel operations. On the other hand, the CAS mission necessitates an intermingled endeavor because, by character, it is executed when surface forces are present. The expectation of being in close proximity to friendly forces and conducting detailed integration demands a symbiotic relationship.

Operating from an airman's perspective, there are two distinct ends of the spectrum of conflict. At one end is a full spectrum fight and the airspace is not permissive, it is highly contested because the opponent has comparable technological capability to defend against the United States' air forces. Moving down the spectrum, it ends at a highly permissive environment where air superiority does not need to be gained through force because the opponent does not have air defense capabilities. In this environment air forces have complete freedom of maneuver and ability to operate without resistance. The belief is CAS should and would only be conducted in a highly permissive environment and the mission would not be required in a high-end fight. These dynamics place the full-spectrum, high-end fight air war and CAS mission at different ends of the spectrum. It also places the air-centric fight and combined arms fight at different ends of the spectrum. If the saying is correct, you can't burn a candle at both ends, the Air Force will be hard-pressed to meet both commitments. It appears, however, that the priority has been determined when it was stated, "If you lose a counterinsurgency action, it will be embarrassing. If you lose the full-spectrum conflict, it could be catastrophic."[6] This

[6] Welsh III, "Squaring the Circle, (lecture, American Enterprise Institute, Washington, DC, 11 December 2013).

statement implies the Air Force must focus on full-spectrum, high-end conflict. While this seems logical, it leads to some questions: what is the cost in blood and treasure of pursuing one end of the spectrum? How are the joint missions affected? How does focusing on an air-centric high-end conflict affect the relationship the Air Force has with the other Services? Is it a zero-sum equation?

Thesis

The purpose of this paper is to examine how designing a force for the most-dangerous scenario affects the Air Force's ability to cooperate with the Army in the conduct of its joint mission areas, specifically CAS. It is true the CAS mission, like every joint mission, is not wrapped up into a platform. The Air Force has made strong verbal commitments to preserving this legacy mission, however, is it possible the Air Force is unknowingly severing critical ties with the Army? If not to that extreme, are the current decisions, driven by a focus on the most-dangerous scenario, crippling the Air Force's ability cooperate with the Army and to provide CAS, especially in permissive environments? It is commonly expressed that, if there is one certainty, tomorrow's fight will be a joint fight. Given that, it is imperative for the Air Force to foster inter-service cooperation. Therefore, it is necessary to understand where the Air Force derives its most-dangerous scenario and the implications or the effect on the joint team of designing a force based on its greatest fear.

Method

Analyzing this conundrum began with the construction a theoretical framework. Scanning the available material, theories from the field of organizational behavior were most useful. The framework incorporated two organizational theories. They are Lina Svedin's *Organizational Cooperation in Crisis* and Dominic Johnson and Dominic Tierney's *Rubicon Theory of War*. Chapter 2 in this paper provides a detailed description of the theoretical framework. It begins by postulating that organizations, like people, are motivated more by fear and loss than potential gain. Each Service senses both fear and opportunity in the security environment, but it responds more strongly to fear. Each perceives a most-dangerous scenario related to the highest national threat. This establishes a tangible construct for which the Service can organize, train, and equip. Since the scenario is specific to the Service's roles and missions, it becomes a part of the

organization's basic values. By attaching the organization's core values to the most-dangerous scenario, jeopardizing one affects the other. The moment the Service is confronted with a crisis, it will encase itself in the most-dangerous scenario, retracting all peripheral concepts. This forms an impenetrable barrier around the organization, potentially amplifying inter-service rivalry, reducing cooperation, and driving the organization to focus on its distinctive qualities and/or missions. Unless there is external impetus or another Service is enclosed in the same scenario, the missions and resources requiring inter-service cooperation are negatively affected.

Using the CAS mission as the joint mission to focus the paper, it is vital to establish a common understanding of the dynamic nature of CAS. Chapter 3 will discuss what the CAS mission is, its unique character, and how the Air Force and Army see it from different perspectives. Chapters 4-6 will apply the theoretical framework to three historical case studies: Korea, Vietnam, and Desert Storm. The case studies focus on the interwar years preceding the conflicts for two reasons. Today, as the drawdown from Afghanistan is completed, the US military is approaching an interwar period. The lessons from previous interwar periods may be applied early enough to forestall negative outcomes. Secondly, in times of war, political objectives and end states act as forcing functions that drive cooperation. This unified effort can be difficult to stimulate in peacetime void of common aims and the moral imperatives of combat.

Documenting case studies of CAS from its inception through 1990, historian Benjamin Cooling determined six hurdles affecting the mission. They include organization, numbers and type aircraft, personalities, institutional policies, technology, and ideology.[7] The categories of ideology (doctrine), type aircraft, and organization are cited in the arguments made against the Air Force's dedication to the CAS mission. Therefore, the variables that will be analyzed in each case study, along with the perceived most dangerous environments, are the air-to-ground doctrine, the aircraft and personnel, and the organization and training. Analysis will be interwoven in the case-study chapters, leaving Chapter 7 for implications and lessons learned. These conclusions will provide recommended actions along with areas for continued reflection and future study.

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[7] *Case Studies in the Development of Close Air Support,* Special Studies (Washington, D.C.: Office of Air Force History, 1990), 2.

Limitations

The time allotted for this paper limits the breadth of topics or issues that would ideally be included in the conversation. This is an attempt to be inclusive enough to begin wringing out the enormously difficult problem of planning for an uncertain future while not taking a zero-sum approach. This paper could be improved in several ways: First, by using the same framework to examine the relationship of the Navy and Marine Corps regarding CAS. Secondly, including other joint-heavy missions such as air transport and ISR could widen perspective. Lastly, the chronology could be expanded with case studies after Desert Storm.

Sources

Sources for this paper were collected from various books, articles, transcripts, documents, and other research papers. A variety of primary and secondary sources were used in an effort to collect as much historical data as possible in the time allocated.

Summary

Air forces have altered the shape of war, exploiting a third dimension, which no military can ignore. Command over this domain is sought from both the air and ground, to allow militaries to operate freely and preserve the sovereignty of cities and nations. For the last two decades the US Air Force has gained and maintained a level of air superiority unmatched by any opponent, allowing its land and naval forces freedom of maneuver without a threat from above. The use of air power does not end when air superiority is gained. The latter is only a means to a vast array of capabilities. But what is air supremacy worth if what we do with airpower underneath it is ineffective? The Air Force cannot afford to adopt a zero-sum mentality. Focusing on the full-spectrum, high-end fight may be necessary but it may also be detrimental. Accepting that the Air Force must walk down that path because the threat must be accounted for and countered, it is vital to understand what is being left at the six o'clock and at what risk.

Chapter 2

Building a Theoretical Framework

Theory is instituted that each person in succession may not have to go through the same labor of clearing the ground and toiling through his subject, but may find the thing in order, and light admitted on it.

-Carl von Clausewitz

Numerous histories, articles, and studies document Close Air Support (CAS). The majority of the work makes an effort to examine the relationship and roles between the Air Force and Army in CAS. For example, in 1971, the Directorate of Doctrine, Concepts, and Objectives, Headquarters Air Force requested Project RAND complete a study to address the "long-term continuing controversy between the Air Force and the Army over close air support".[1] In 1982, the Air Force Director of Plans asked the Office of Air Force History to document various case studies on the development of close air support. The frequency of CAS missions flown in Afghanistan by coalition partners has catapulted the discussion across the ocean into France and Britain.[2] Since the first time a pilot dropped a weapon on ground forces in World War I, many have labored to understand the intense clashes between air forces and armies over air-to-ground support. Historian Benjamin Cooling made the observation, "In spite of the fact that close air support has shown that it is often one of the truly pivotal uses of air power in modern warfare, no single issue seems more quickly to lead to outspoken disagreement between professionals charged with coordinating the air-land battle."[3]

The range of arguments throughout the history of CAS is wide, but there are three main contentions. The first is a dispute on the most efficient use of airpower, whether to support the immediate need of troops in contact or to target enemy capabilities, such as

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[1] Alfred Goldberg and Lt Col Donald Smith, *Army-Air Force Relations: The Close Air Support Issue*, United States Air Force Project RAND (Santa Monica, California: RAND, October 1971), iii.

[2] Elie Tenebaum, "The Battle Over Fire Support: The CAS Challenge and Future Artillery," *Focus stratégique*, no. 35 (October 2012): 7–61. This research paper was conducted to determine the efficacy of using CAS over fielded artillery. There have also been recent news articles in British news outlets discussing US force structure decisions will have on the Air Force – Army relationship.

[3] *Case Studies in the Development of Close Air Support*, Special Studies (Washington, D.C.: Office of Air Force History, 1990), 2.

reserve troops or supply lines, posing a long-term threat. Secondly, there is contention on which aircraft are best suited for this role, a specialized dedicated platform or a multi-use aircraft. Lastly, there is a strong disagreement on who should allocate and command the aircraft. Each one of these issues has caused friction between the Air Force and Army. Each points to differences in fundamental beliefs and experience. There is no denying these issues have played a substantial role in creating cleavages between the Services. Given there are such deeply rooted ideas underpinning the Services' positions on each matter, conflict between the Air Force and Army regarding CAS might seem inevitable. Yet, just as there are periods of war and peace, in inter-service relationships there are periods of conflict and cooperation, even in CAS. Under what conditions do they occur? A theory should attempt to answer this question.

Why a Theory?

The origins of the Air Force and attainment of independence from the Army established a relationship built on competition. Competition is the combination of both cooperation and conflict. The familiar adage, iron sharpens iron, is a good reminder that competition can be beneficial. Taken to one extreme, this concept would entail too much cooperation, resulting in accommodations, ultimately weakening both organizations. The other extreme would be too much competition, causing avoidance or opposition, degrading the Services' ability to perform joint missions, such as CAS. A balance of cooperation and conflict is likely most beneficial to inter-service relations. Although it may appear to be the exception, the Air Force and Army have been able to find this balance and cooperate in delivering the needed air support for surface forces even though contrary deep-seated beliefs disrupt the relationship. Therefore, it is necessary to examine which factors are actually at play in driving the Services to cooperate versus compete; finding what is necessary to ensure each blade is sharpened appropriately.

Inter-service relationships are complex and multifaceted; therefore it is imperative to simplify them and focus the examination. Crafting a theory can aid this process by creating a picture or establishing boundaries for a frame of reference.[4] One of the most crucial steps in conducting a talk-on to a target is to set a common fixed point to which

[4] Kenneth N. Waltz, *Theory of International Politics* (Long Grove, Illinois: Waveland Press Inc., 1979), 8.

the pilot and ground controller can refer. Not only does this baseline reference create a starting point, but it can also become the basis for starting over when either party loses track. Hence, for this study, the theory acts as the initial reference point. Kenneth Waltz explains that theories are intended to isolate subjects and arrange the phenomena in such a manner that a pattern will emerge.[5] In his treatise on war, Carl Von Clausewitz discusses the measure of a successful theory. He states, "Theory will have fulfilled its main task when it is used to analyze the constituent elements of war, to distinguish precisely what at first sight seems fused, to explain in full the properties of the means employed and to show their probable effects, to define clearly the nature of the ends in view, and to illuminate all phases of warfare in a thorough critical inquiry."[6] Although he was talking specifically of a theory on war, his insights as to the function of theory are worthwhile for a range of studies. Clausewitz sought to use theory to analyze, distinguish, explain, define, and illuminate the components of his subject. The theory proposed here pursues that same goal.

Using a theory to simplify a subject will inherently leave some things aside while concentrating on others. Constructing a theory is not meant to satisfy the innumerable associations that inhere in any complex interaction, but to simplify the relationship in such a manner to create a better understanding of the topic. Waltz expresses this by stating, "Theories do construct *a* reality, but no one can ever say that it is *the* reality."[7] Given this role, theories will be constructed to act as scaffolding, bracing the propositions to the subject at hand. Assembly requires isolating a small number of factors, removing peripheral topics, aggregating disparate elements, and idealizing certain components even though perfection cannot be attained.[8] But just as in any building project, it is critical to lay the foundation. Carl Builder suggests the foundation comes from the initial proposition when he says, "a theory is a supposition or conjecture about the relationship

[5] Waltz, *Theory of International Politics,* 10-12.
[6] Clausewitz, *On War*, 141.
[7] Waltz, *Theory of International Politics,* 5.
[8] Waltz, *Theory of International Politics,* 10.

between things."[9] This particular theory aims to identify what drives cooperation and competition between the Services and how either affects the ability to conduct CAS.

Theory

The theory proposes that *the services are more motivated by fear than potential gain. They are particularly motivated by their greatest fears, which will be expressed as the "most-dangerous scenario" they can envision. Furthermore, designing a force for a most-dangerous scenario creates the pattern where a perceived crisis reinforces the threat of the scenario and the Service's unique role in it, thereby entrenching the Service in its patterns of behavior. When their greatest fears do not overlap, the Air Force and Army diverge from cooperative behavior, even to the point of neglecting joint missions, specifically CAS.*

Components

This theory is crafted by combing elements of Lina Svedin's *Organizational Cooperation in Crisis Theory* and Dominic Johnson and Dominic Tierney's *Rubicon Theory of War*. This paper isolates two main actors, the Air Force and the Army, to test the theory. The comments, documents, and decisions made by the Air Staff and Army Staff in each organization will represent the overall perspective of each Service. Although the Air Force and Army are organizations, "because organizations share many of the same characteristics of the people who make up their workforce, they are also capable of making decisions."[10] To avoid becoming too unitary in the analysis of the Air Force and Army, it is important to look inside the larger organizations as well. Therefore, this study will disaggregate the Tactical Air Command from the larger Air Force and Training and Doctrine Command (TRADOC) from the larger Army. Since the CAS mission is embedded in sub-organizations, drilling down will help to pinpoint continuities or discontinuities within the theoretical framework. The main object of the

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[9] Carl H. Builder, *The Icarus Syndrome: The Role of Air Power Theory in the Evolution and Fate of the U.S. Air Force* (New Brunswick, New Jersey: Transaction Publisher, 1994), 206.

[10] Lina M. Svedin, *Organizational Cooperation in Crises* (Burlington, Vermont: Ashgate Publishing Company, 2009), 18.

theory is cooperation between the Services. Walking through the assembly of the assumptions underpinning the theory will explain how it was developed and will lead to how it will be tested.

Assumptions

The first assumption: political leaders and the military assess the strategic landscape and classify threats to the nation. Following World War II the US took steps to develop a military *in being*; one that is capable of employing military capabilities to the area of conflict. The experience of two global wars infused the nation with a strong desire for a capable military available at a moment's notice to secure the interests of the nation and defeat rising aggression. The combination of this national request, the rise to a hegemonic status, and witnessing the aggression demonstrated by the Soviet Union in Czechoslovakia and Berlin in 1948, led the US to begin surveying the world for national security threats. This included identifying aggressive actors willing to target the alliance embodied by a newly formed institution, NATO.

A fifty-year rivalry between the Soviet Union and the US conditioned the US to habitually identify the nation's most dangerous threat as state of equal or near equal military and economic power. A tangible adversary deemed a future threat to national security was the guiding light for military decision-makers and planners. To this day this concept is the beacon that illuminates the most dangerous war, and becomes the catalyst for defining the full-spectrum, high-end fight. The opponent is not just a generic adversary, but it is a tangible threat with forces that can be counted, military capabilities that can be tracked, and doctrine that can be examined and countered. Secondary threats exist alongside this primary threat and will span the entire spectrum of conflict, from nuclear war to terrorism, to demonstrate political and military leaders have accounted for all the eventualities. Establishing these threats provides the Services the gauge necessary to quantify their purpose.

The second assumption: the Services will perceive a unique, most-dangerous scenario based on the sanctioned threat. Right or wrong, the Cold War conditioned the US political and military structures to classify the highest threat as nations with near-peer capabilities. The Services have since taken these assigned-threat countries, focusing on the opponents' most lethal capabilities, and designed a scenario. Each Service, based on

its respective domain, uniquely crafted a scenario. The Service determined the characteristics of the most-dangerous scenario in light the enemy's capabilities and the Service's most effective response. For example, early in the Cold War the Soviet Union was labeled as the nation's most-dangerous threat. The Services took the strategic threat of the Soviet Union and broke it into operational threats to isolate domain-specific responses and scenarios. To the Air Force, Soviet nuclear bombers reaching US soil presented the most-dangerous scenario. For the Army, the massive Soviet Army stationed in Eastern Europe marching west to conquer Western Europe was the most-dangerous scenario. This compartmentalization of the threat by domain led the Services to view the opponent differently. Today with the proliferation of weapons systems and technology, the highest known capability is transposed onto various opponents reinforcing the worst-case-scenario mentality. In some cases a country or actor without a resident capability is assumed it can quickly acquire it, enlarging the most-dangerous scenario. Chemical weapons would be an example of this. Although terrorists have not demonstrated they own or will operate them, the most-dangerous scenario includes terrorists with WMD. As a result, each Service derives a most-dangerous scenario it foresees based on its operational domain, regardless of probability or intent.

The third assumption: Services developing a tangible most-dangerous scenario from a designated opponent create a structure from which crises are triggered. The scenario labels an opponent with a particular set of capabilities enabling the Service to devise specific responses. A crisis is triggered when the scenario's assumptions are affected by a change in the enemy's capability, a change to the Service's response capabilities, or any external factor altering the actual scenario. For example, when the Soviets tested their atomic bomb, a change in the enemy's capabilities impacted the Air Force's most-dangerous scenario, triggering a crisis. Lina Svedin, in *Organizational Cooperation in Crisis*, defines crises "as situations where decision makers perceive that there is urgency, uncertainty, and a threat to basic values."[11] Defined in this manner, a crisis is subjective because it is based on the perception of the urgency, uncertainty, or threat.

[11] Svedin, *Organizational Cooperation in Crises,* 19.

The triggers may be hard facts or data, but the crisis is derived from each Service's perception of how these affect their role and their scenario. For this reason, perceptions can be miscalculated, causing the Services to assess the degree of uncertainty, urgency, and threat to basic values only in light of their own self-image. Robert Jervis explains this, stating, "the decision maker's perceptions are restricted not in the sense that he examines information on a narrow range of subjects but in the sense that he assumes others are focused on that which concerns him. This misperception is related to the propensity of actors to see themselves as central to others' behaviors. An actor's knowledge of what he wants, what he fears, and what he has done sets the framework for his perceptions. Others are seen as orienting themselves toward his concerns, as helping or hurting him."[12] When the Soviet Union detonated its first nuclear bomb, a crisis occurred. The Army and Air Force's perception of the crisis affected their response to the urgency, uncertainty, and threat to basic values. Given the influence this revelation had on the Air Force's role as the premier nuclear-capable force, it was apt to assume all other organizations would orient themselves toward their concerns. Whereas, the Army who had a significant portion of its troops stationed within the range of nuclear detonation, assumed outside organizations would be concerned with its peculiar interests. For the Services, who are chartered to defend the nation's interests and provide security, the smallest actions by an adversary can trigger a crisis.

When an opponent gains a new capability affecting the most-dangerous scenario a sense of urgency is ignited. Urgency is characterized by "a finite amount of time in which decision makers are able to respond to the situation."[13] The decision-makers must quickly account for the new capability and determine if they have the appropriate response or need to acquire it. The temporal component may drive immediate action depending on the perceived likelihood a conflict would soon erupt. It is also possible for a sense of urgency to occur when the internal capabilities of a Service appear insufficient to carrying out the roles needed to counter the most dangerous scenario. This leads a Service to seek a more advanced capability designed for the most-dangerous scenario.

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[12] Robert Jervis, *Perception and Misperception in International Politics* (Princeton, New Jersey: Princeton University Press, 1976), 212.
[13] Svedin, *Organizational Cooperation in Crises*, 20.

There is inherent uncertainty in planning for the most-dangerous scenario. When a crisis is triggered, the degree of uncertainty rises, as decision-makers are now unsure of the "origin and risks of the crisis as well as the impacts of their actions."[14] One of the key elements of a successful military strategy is reliable intelligence on the United States' current capabilities and the opponent's. Uncertainty appears when the assumptions or hypothesis used to understand the most-dangerous scenario are altered by new information. This intelligence may shatter the confidence the Service had in the assumptions underpinning the most-dangerous scenario, or even change them completely, elevating the need to rectify the dissonance. In an attempt to resolve the uncertainty, the Service will turn its focus to restoring the most-dangerous scenario and the ways and means to counter the opponent.

According to Svedin's description of a crisis, basic values are the "intrinsic principles or qualities that are necessary for the country or organization to exist."[15] Basic values are tied directly to purpose. The scenario developed by each Service is reflective of how it views its national purpose. The Service's most-dangerous scenario is crafted to imply that one particular Service is uniquely suited to counter the opponent. When a trigger occurs, the Service may perceive a threat to its basic values in two ways. First, the threat may expose weaknesses in the Services' planned response. Second, a new capability may shift the response to a new domain, negating a particular Services' principal role in the conflict. The most-dangerous scenario embodies the Service's role and becomes ingrained in its basic values. It is then incumbent on the Service to respond and dedicate attention and resources to defend both the scenario and their response to it when they are threatened. Basic values, similar to urgency and uncertainty, are based on perception. During the Missile Age, development of nuclear missiles was viewed as a threat to the Air Force's basic values because it perceived strategic bombing as the most effective counter to its most-dangerous scenario.

The trigger does not always come from the opponent. It is possible for political or military organizations to prompt a crisis. As described above there are three conditions that typify a crisis. They are: a perceived sense of urgency, uncertainty, and a threat to

[14] Svedin, *Organizational Cooperation in Crises,* 20.
[15] Svedin, *Organizational Cooperation in Crises,* 20.

basic values. Congressional budget prescriptions, such as sequestration, meet all three conditions. Change in leadership, from the Commander-in-Chief to the Chairman of the Joint Chiefs, can trigger a crisis within the Services, especially if the individuals have been outspoken in their dissatisfaction with a particular Service. If this is perceived as a threat to basic values because it endangers the crafted scenario or the Services' role in that most-dangerous scenario, the Service will seek to neutralize the crisis by proselytizing the gravity of the threat and the necessity of its role. It becomes necessary for the Service to remind the political and military organizations of the serious capabilities of the commonly agreed upon opponent and reinvigorate support for the Service's role in countering those capabilities. Since, the Service views everything in terms of its most-dangerous scenario, the assumption is that others outside the organization hold the same perspective, and once reminded the gravity of the scenario, will ease their attacks on the Service.

Interestingly, this hypothesis rarely succeeds. Perceptions are derived from beliefs, evidence, and experience.[16] These factors are unique to each Service and political organization because each of them is viewing the crisis from the perspective of their most-dangerous scenario. The perceptions are unique, and redirecting the focus to the most-dangerous threat does eliminate this difference. What appears self-evident to the Air Force leaders regarding the most-dangerous scenario, because they view it as the reason for their existence, would not appear so to the Army. Jerivs warns the Services not to link their institutional purpose to the most-dangerous scenario (theoretical environment) or to the opponent (other actors). He states, "Organizations should not allow their identities to become tied to specific theories and images of other actors. If this occurs it is highly probable that sub goals will take on a value of their own and information about alternative routes to the higher goals will not be considered."[17]

Devising a most-dangerous scenario establishes the initial framework from which a crisis will be triggered. For a crisis to occur, all three components must be present; urgency, uncertainty, and a threat to basic values. A crisis can affect one Service,

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[16] Jervis, *Perceptions and Misperceptions,* 203.
[17] Robert Jervis, *Perception and Misperception in International Politics* (Princeton, New Jersey: Princeton University Press, 1976), 419.

multiple Services, or the entire military structure, depending on the perception and relationship to the distinct most-dangerous scenarios.

Fourth assumption: once the trigger is perceived as a crisis, a circular pattern of behavior can emerge typified by an "implemental" mindset. Here the crisis challenges the framework and assumptions of the most-dangerous scenario. In doing so the Service is forced to focus on its scenario and its role in countering the opponent. It draws attention, resources, and discussions to the most-dangerous scenario, reinforcing its peril, and focusing organizational thinking when determining a response. A focus on worst-case circumstances and the impact of the crisis hardens the Service's resolve that its role is crucial in combating the opponent in this scenario and it seeks ways to achieve this. The organization becomes mentally entrenched in the most-dangerous scenario and it becomes the lens through which the world outside is viewed.

In the *Rubicon Theory of War*, Dominc Johnson and Dominc Tierney detail the historical account of Julius Caesar and his army crossing the Rubicon, making war inevitable, to represent the point of no return. From this description, they go on to craft a theory of crossing a psychological Rubicon, adopting a particular mindset. Specifically, "when people perceive war to be imminent they will switch from a *deliberate* mind-set to an *implemental* mindset."[18] The immediacy of war sparks fear, and anxiety. A crisis sparks the perception of immediacy. Therefore, for the theory most relevant to the study of close air support, the crisis leads decision makers to perceive an immediacy of conflict and they will switch from *deliberate* to *implemental* mind-set. Immediacy does not necessarily imply the conflict or war will occur in a short period of time. Since immediacy is based on perception, it is linked to the ability for a Service to respond. Therefore, not having a capability sufficient to counter the adversary assumes the adversary could start a war at any moment. In this case, the military organization that is technically behind in the arms race will assume war is imminent. This implemental mindset alters the way in which organizations interact with other organizations. Since the implemental mindset is associated with fear and anxiety, it causes a defensive reflex.

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[18] Dominic D. P. Johnson and Dominic Tierney, "The Rubicon Theory of War: How the Path to Conflict Reaches the Point of No Return," *International Security* 36, no. 1 (Summer 2011): 7.

This impulse closes the organization off from any psychological disruption. The most-dangerous scenario and the Services' perceived role further influences the responses to the perceived crisis. The implemental mindset envelops the organization even further in its scenario. This mental cocoon impacts the Service's interactions with other organizations.

According to Johnson and Tierney there are six phenomena that occur when an organization enters the *implemental* mindset. First, the organization has a lower tolerance for receiving incoming information, "seeking information that supports the choices already made."[19] The second phenomenon is that the organization will be more biased in processing incoming information. Jervis takes this one step further, "When evidence gradually accumulates that the view is wrong, those who hold the view often seem willfully stubborn as they refuse to recognize that while their beliefs may have been tenable in the past, they are now clearly incorrect."[20] Three phenomena increase the organization's vulnerabilities; they are more likely to have cognitive dissonance, give self-serving evaluations, and have an illusion of control.[21] Cognitive dissonance occurs when an organization or individual "ignores information that does not fit, twists it so that it confirms, or at least does not contradict beliefs or deny the validity of a decision."[22] Losing the objective view and resorting to overly positive reports of abilities is an indication the organization is exhibiting self-serving attributes. The illusion of control is "the tendency to believe one can control events, even when they are inherently uncontrollable."[23] The final phenomenon involves having an overly optimistic expectation of the task, where the outcome it assumed to result in positive effects versus negative, and the devil's advocate is shunned or ostracized to avoid dissenting views.[24] Each of these six consequences of entering into the implemental mindset affects inter-service relationships. The encroachment of any concept or idea that attempts to enter the mental barrier created by the most-dangerous scenario, the crisis, and the perceived

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[19] Johnson and Tierney, *The Rubicon Theory of War*, 15.
[20] Jervis, *Perception and Misperception*, 176.
[21] Johnson and Tierney, *The Rubicon Theory of War*, 15.
[22] Jervis, *Perception and Misperception*, 156.
[23] Johnson and Tierney, *The Rubicon Theory of War*, 17.
[24] Johnson and Tierney, *The Rubicon Theory of War*, 17.

response is repelled. The Service residing behind this psychological fortress perceives those on the outside as adversaries attempting to target its role and purpose. Parochial actions of the Services reside in the psychological shift to the implemental mindset. This mindset further cements belief in the catastrophic nature of the Service's most-dangerous scenario as well as the counter's essential role in national security.

My sixth assumption: when a Service becomes entrenched in an implemental mindset, it is driven to preserve and promote the most-dangerous scenario and its role, thereby affecting inter-service relationships. These relationships are exhibited through conflict or cooperation. Although it would appear an organization operating in the implemental mindset would be confrontational, this may not always be the case. If there is collaboration on the most-dangerous scenario and it requires a joint effort in combating the opponent, the participating Services will view the crisis through the same lens. In this case friction will not occur, and the other Service will adapt to decisions, avoid questioning the original assumptions, and provide support for the conclusions. Under these conditions cooperation will occur. In the more typical instance, where Services approach the crisis from different scenarios, it is expected that conflicts will occur. The Services become more self-serving, demonstrate the illusion of control, adopt more optimistic views of their actions and abilities, and resist or twist information. Commitment to the decisions in an implemental mindset becomes the end; anything that challenges those commitments is viewed as threatening. This occurrence can set off a version of a security dilemma where it appears each Service is pursuing a narrow self-interest. In doing so the other Service may feel threatened and respond in a way that actually triggers a crisis and pushes the other Service even further into an implemental mindset, creating a spiral effect. Jervis comments, "people perceive what they expect to be present."[25] His example, using nations; "a state is viewed as hostile, behavior that others may see as neutral or friendly will be ignored, distorted, or seen as attempted duplicity."[26] Crises are based on subjective perceptions, and past experiences reside in the memory, so interpretations are construed from previous interactions as well. This may tilt the scales from cooperation to conflict.

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[25] Jervis, *Perception and Misperception,* 68.
[26] Jervis, *Perception and Misperception,* 68.

It is possible to identify if organizations are cooperating or conflicting with one another. Lina Svedin has categorized several indicators to aid in this determination. If an organization increases contact, signs agreements, verbally expressed support of another organization, or yields it is demonstrating cooperation. When an organization expresses disapproval publically, makes demands with ultimatums, rejects decisions, or reduces the amount of contact or relations, it is generating conflict. These criteria will be used in the case studies to examine the interactions between the Air Force and Army specifically in regard to the CAS mission. The purpose is to understand how, in peacetime, designing a force for the most-dangerous scenario affects the Services' relationships and ultimately ability to conduct CAS.

Conceptualizing the Theory

To summarize, political and military leaders will designate the most dangerous threat(s) to national security. The separate Services develop a most-dangerous scenario based on the highest capabilities of an opponent and relative to the response the Service provides in light of its specific domains. The scenario and the Services' role in combating the threat are fused and become foundational in the Service's purpose, or basic values. When an event occurs that creates uncertainty, urgency, and threatens these basic values, a crisis develops. The Service responds to the crisis in two ways. First, it reinforces the existence of the most-dangerous scenario and the importance of preparing for that event. Secondly, the Service stiffens support for its role in countering the opponent in the most-dangerous scenario. When this occurs the Service becomes insulated in the scenario and enters into an *implemental* mindset. A shift to an *implemental* mindset drives efforts to preserve the validity of the most-dangerous scenario and Service's role to counter it. As the organization mentally orients around and focuses on the most-dangerous scenario, inter-service relationships result in conflict or cooperation. If one Service's decisions are perceived by the other to be self-serving, the Services will compete. Cooperation will occur if other organizations do not feel threatened or agree with the Service's actions and decisions.

Testing

The purpose of testing this theory is to determine if it can help explain how focusing on the most-dangerous scenario affects the Air Force's ability to cooperate with the Army in joint mission areas, especially when the foundational beliefs about how to use airpower in support of ground operations have not changed over time. To accomplish this it is necessary to look back into history. This paper will use three case studies to test the explanatory power of the theory. Many times the CAS mission is examined in terms of its application in various wars. Here, the CAS mission will be analyzed from the interwar periods. This method has been selected for two reasons. First, the US military is drawing down from over a decade of war and will likely be entering an interwar period. The anticipation of budget cuts and reduction of forces places the Services on the precipice of change, and in each case the CAS mission is impacted. The second rationale for an interwar focus has to do with the simple fact that war elicits cooperation among Services based on shared risk. This forcing function has less of an impact in peace, making conflict more likely. For these reasons the case studies will span the terminal period of one war through the start of the next war. The first case study will involve the period between World War II and Korea. The second will go from Korean War to the Vietnam War. Finally, the last case study spans from the Vietnam to Desert Storm.

Theories are used to help simplify, but this cannot be achieved without reducing some variables. Given the considerable timespan covered in the three case studies, this paper will focus on four main variables to test the theory. Testing the theory requires a methodical process to be used for each case. The variables were selected based on how they most directly influenced joint missions. The analysis will concentrate on doctrine, organization, training, and aircraft. Doctrine provides a look into the Services' beliefs or perceptions. Dennis Drew defines doctrine as, "what we believe about the best way to conduct military affairs" and contends it "is the result of an interpretation of the changing circumstances."[27] The Services' doctrine will help identify which basic values can be threatened. The remaining three variables, organization, training, and aircraft, are the

[27] Dennis Drew and Don Snow, *Making Strategy: An Introduction to National Security Processes and Problems* (Maxwell Air Force Base, AL: Air University Press, 1988), 163.

tangible outcome of decisions senior leaders make to react to a crisis. These variables highlight the depth to which the implemental mindset has been ingrained and whether the cooperation or conflict has occurred.

Summary

The American public expects the military to function as a unified body protecting the nation and its vital interests. Failure to cooperate successfully both in and out of war can be perceived by the public as a weakness of the whole, causing a loss of trust, and ultimately a lack of protection. The Services take seriously their role in securing the nation. The purpose of each Service is derived from combatting the most dangerous threat in the most-dangerous scenario. This puts the Services on divergent paths from one another since each Service compartmentalizes the opponent based on that scenario. Joint missions are most impacted by this activity when the most-dangerous scenario dictates autonomous missions, pulling each Service further away from coordinated efforts. The ultimate aim of this analysis is to ameliorate the effects of planning for the most-dangerous scenario by considering how it affects the relationship of the Air Force with the Army, specifically in light of conducting joint missions like CAS.

Chapter 3

Close Air Support

While strategic nuclear warfare is, in a real sense, more terrible to contemplate, the strategic forces and weapons that define it were chosen from alternatives that are relatively few in number with the war games defined by a similarly small finite number of moves and counter moves. To do the same analysis within the regime of tactical warfare is much more difficult. One of the reasons is the very large variety of inputs and alternatives. Also, while strategic alternatives are mostly scientific and logical in nature, we find tactical warfare alternatives are a blend of both science and art, where changing and imaginative tactics are a significant variant.

-Dr. Thomas P. Cheatham, Jr.,

The experience of the last decade in OPERATION ENDURING FREEDOM (OEF) and OPERATION IRAQI FREEDOM (OIF) has elevated close air support (CAS) to everyday military vernacular. In OIF, from 2007 through 2011, air forces flew 55,388 CAS missions.[1] In OEF, from 2007 through January 2014 Coalition air forces conducted 169,750 CAS missions.[2] In OEF alone, 65 CAS missions were being executed daily on average. This enormous allocation of CAS-labeled missions has propelled CAS to the forefront of joint and Air Force discourse. The frequency of CAS-labeled missions being executed today assumes everyone has a clear understanding of the dynamic nature of the mission. A 2008 Air Force Magazine article detailed the variety of tactics being employed under the CAS designation, which included anything from strikes with Joint

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[1] USCENTAF Public Affairs, "Combined Forces Air Component Commander 2008-2011 Airpower Statistics" (Presentation presented at the Combined Air Operations Center, Air Force Central Command, August 3, 2011), accessed March 9, 2014, http://www.globalsecurity.org/jhtml/jframe.html#http://www.globalsecurity.org/military/library/report/2011/cfacc_2008-2011_afd-110804-001.pdf|||; USCENTAF Public Affairs, "Combined Forces Air Component Commander 2007-2010 Airpower Statistics" (Presentation presented at the Combined Air Operations Center, Air Force Central Command, December 31, 2010), accessed March 9, 2014, http://www.globalsecurity.org/military/library/report/2011/cfacc_2007-2010_afd-101214-006.pdf.

[2] USCENTAF Public Affairs, "CFAFCC Air Power Statistics"; USCENTAF Public Affairs, "Combined Forces Air Component Commander 2010-2014 Airpower Statistics" (Presentation presented at the Combined Air Operations Center, Air Force Central Command, January 31, 2014), accessed March 9, 2014, http://www.afcent.af.mil/shared/media/document/AFD-140219-003.pdf. The 2007-2010 report cited above was also used to calculate the Afghanistan data.

Direct Attack Munitions, to shows of force, to armed escort. The article labeled this a "new kind of CAS" and coined the mission as "armed overwatch".[3] The article pointed to the similarity in the high number of CAS missions flown in previous conflicts to show a shift in the CAS mission. It stated, "In Korea, Far East Air Forces (FEAF) alone logged about 238 sorties per day" referencing the number of CAS missions flown in support of the Pusan Perimeter battles in August 1950.[4] Is it possible to point to the number of CAS missions flown and assume a revision to this age-old mission has arrived? Granted the means in which CAS is conducted has changed, but has a revised definition of CAS emerged? The harm is not in comparing the CAS missions from OIF and OEF to previous wars, the harm is in combining the CAS mission with several well-established missions such as interdiction or even battlefield interdiction and devising a new concept.

Designating every strike mission in OIF and OEF as CAS has clouded its true character. Air-to-ground operations performed today constitute both interdiction and close air support. It may seem nuanced to some to emphasize a clear distinction, however, it is the nuance that make each very distinct. There are similarities in these two missions, and there is a layer of overlap. Problems arise, however, when individuals view CAS and interdiction only in the grey area where they meet. This perspective leads people to coin the term "armed overwatch" and apply interdiction assumptions wholesale to CAS, washing out its distinctive and complex character. Many times when Air Force and Army personnel are debating or discussing CAS, there is a tendency for Airmen to visualize CAS through the interdiction lens, taking a bird's eye view of the battlefield free from the constraints of the ground order of battle littered with Forward Support Coordination Lines (FSCL), Forward Line of Own Troops (FLOT), Forward Edge of the Battle Area (FEBA), etc. Army personnel see CAS differently, grounding their perspective in the foundational definition of close support, and look at it from a worm's eye view, encased behind a FEBA, FLOT, FSCL and confronted with threats (potentially on all sides). This chapter aims to bring awareness of the complexities of CAS and expose how looking at CAS from high above the treetops and wrapping it in the

[3] Rebecca Grant, "Armed Overwatch," *Air Force Magazine* 91, no. 12 (December 2008): 41.
[4] Grant, *Armed Overwatch*, 41.

interdiction context mistakenly sidelines the detailed integration of the mission and generates false suppositions. Understanding the differences in these perspectives and the particulars of these two missions provides the backdrop for how certain efforts by the Air Force create conflict with the Army.

Close Air Support Defined

The official definition of CAS has remained relatively consistent since its arrival in during WWI. The Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms* defines CAS as, "Air action by fixed- and rotary-wing aircraft against hostile targets that are in close proximity to friendly forces and that require detailed integration of each air mission with the fire and movement of those forces."[5] Historian Benjamin Cooling asserts, "Stripped to its barest essentials, [the close air support] definition proves deceptively simple."[6] To address its subtle complexities, it is necessary to disaggregate the definition. Typically when the definition is examined, only "close proximity" and "detailed integration" are distinctly discussed. This paper finds it pertinent to separate four key components embedded in the definition. By casting this wider net over the definition, the four components will amplify the unique and difficult nature of conducting this mission and how it is distinguished from other counter-land operations. The definition of CAS addresses who conducts it, against what objectives, under what conditions, and where: 1) air action by fixed and rotary-wing aircraft, 2) hostile targets, 3) close proximity, 4) detailed integration,

Today's CAS definition clearly articulates who will execute the CAS mission, fixed and rotary-wing aircraft. During WWI, when CAS was first being introduced, it didn't matter who conducted it, and the air forces used any flying machine possible, to include balloons, gliders, and airplanes, to preserve ground forces. It wasn't until the Air Force Doctrine Document, AFDD-1 published in 2003, that the type of aircraft became explicit in the definition. Previous definitions plainly stated CAS consisted of "air operations against hostile targets…" or simply "attack by aircraft of hostile ground or

[5] Armed Forces of United States, "Department of Defense Dictionary of Military and Associated Terms" (Joint Staff, February 15, 2014), 39.
[6] Benjamin Franklin Cooling, ed., *Case Studies in the Development of Close Air Support* (Washington, D.C.: Office of Air Force History, 1990).

naval targets".[7] Since the term "aircraft" could be used to encompass fixed-wing and rotary-wing, it begs the question of what benefit there is to the recent change of explicitly stating both.

This recent classification, written after the start of OEF, is important for three reasons. First, the definition does not specify either fixed or rotary as the primary CAS platform, instead they are viewed co-equally, providing a degree of flexibility in assigning available theater assets to the mission. Secondly, associating who does CAS with aircraft addresses aspects of the technology debate. As improvements in technology afford increasing artillery capability and surface-to-surface firepower, the explicit use of fixed- and rotary-wing preserve the role of CAS systems operated from the air. Lastly, the deliberate addition of rotary-wing aircraft extinguishes a long-standing debate on roles and missions between Services and emphasizes the inclusion of the Army's air forces, which are primarily rotary-wing. The definition formally recognizes the Army's ability to take ownership of certain areas where CAS may need to be performed by Army aircraft. This directly challenges the notion that the CAS mission is solely an Air Force role. Contrasting the CAS definition with the opening words in the definition of air interdiction begins to highlight how the Air Force and Army look at CAS from different vantage points. Interdiction is defined as, "Air operations conducted to divert, disrupt, delay, or destroy the enemy's military surface capabilities..."[8] This definition does not mention a particular type of aircraft, appearing to leave the role ambiguous, however, the Air Force is primarily responsible for air operations.

Interestingly, early CAS definitions contained the term "air operations." Today the definition replaces "air operations" with "air actions". This brings to attention one of the main historical debates between the Air Force and Army. There has been a continual fight over the effectiveness and efficiency of multirole versus dedicated platforms. Even during WWI, recognizing the inherent competition in capability an air commander stated, "The war has shown that there is no universal or multipurpose plane which can be used

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[7] James Forrestal, *Functions of the Armed Forces of the Joint Chiefs of Staff*, Memorandum from Secretary of Defense, J.C.S 1478 Series (Washington, D.C.: Joint Chiefs of Staff, April 21, 1948), 13.
[8] Armed Forces of United States, *Department of Defense Dictionary of Military and Associated Terms*, 8.

for pursuit, reconnaissance, and bombing work. Each particular work calls for a different type of plane, specializing in either speed, maneuverability, climbing ability, carrying capacity, or long distance range. In order to embody one of these characteristics in a plane, others must be sacrificed."[9] The Army has consistently argued for a particular design to satisfy the unique nature of the CAS mission. It even made an attempt to secure dedicated Army CAS aircraft in the early 1950s. The Air Force has consistently held the position that air is indivisible and that any platform capable of performing air-to-ground operations can conduct CAS. Labeling CAS as an "air action" signifies it as an event in the campaign, not a specific mission set, whereas air interdiction is coined as an "air operation," giving it particular weight and meaning to the overarching theater campaign.

The second component of the CAS definition is the objective of the mission. The current definition designates that the purpose for the air action is to attack "hostile targets". Earlier versions of the CAS definition have stated it more plainly, specifying the ground and naval forces as targets. Either way, there is a consensus that CAS targets will be enemy troops, equipment, or positions that are hostile to or threatening friendly surface forces. FM 100-20, written in 1943, described CAS targets as "small, well dispersed, and difficult to locate."[10] There is a nature of mobility and concealment typically associated with CAS targets, given their proximity to friendly forces and the dynamics of close combat. CAS targets and the ground situation can change quickly as enemy and friendly forces conduct countering operations to gain the advantage. This lends itself to minimal pre-mission planning and a detailed awareness visually and verbally to ensure pilots understand the current ground order of battle.

Interdiction, on the other hand, defines its target sets as "the enemy's military potential" or the "enemy's military surface capabilities".[11] The important distinction between the CAS targets and the interdiction targets is the temporal element. For CAS the targets are hostile and *directly* affecting friendly forces by inflicting harm or damage

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[9] John Schlight, *Help From Above: Air Force Close Air Support of the Army 1946-1973* (Washington, D.C.: Air Force History and Museums Program, 2003), 7.
[10] War Department, "Field Manual 100-20: Command and Employment of Air Power" (United States Government Printing Office, July 21, 1943), 13.
[11] Armed Forces of United States, "DOD Dictionary.", 8. and AFDD 3-03 Counterland Operations, 28 July 2011, 5.

to their operations. Interdiction targets, on the other hand, are *anticipated* to pose a threat to friendly forces, but at some later time. This means the information pilots receive regarding these targets is different. An interdiction mission typically has a 24-48 hour planning cycle associated with those particular target sets. Aircraft conducting interdiction mission arrive with known target coordinates, and may have even studied specific enemy supply routes or structures and lines of communication. The fluid nature of friendly and enemy ground operations means CAS targets are typically unknown by the incoming aircraft until arriving on scene. The ability for pilots to confirm, visibly and/or spatially, the location of the targets is paramount in CAS, especially when the ground forces are taking fire or on the move, the ground party does not have a joint terminal attack controller, or the target is moving and therefore GPS coordinates are unattainable for the target set. In the early 1970s during the A-7D and A-10 fly-off demonstration, Colonel John Bode led the Saber-Armor Charlie Study, analyzing the total-force effectiveness of the A-10. In his report he commented on the unique nature of CAS mission and its targets stating,

> The forward edge of the battle area (FEBA) is very fluid. It has the characteristics that our friendly forces are always close to it… That requires very intimate integration with the fire and maneuver of the ground forces. That is not only the definition of the mission, but in my opinion that is the key concept of the close air support mission…So that means any airplane that is brought…to do the close air support mission has got to go through a visual acquisition phase, when the pilot determines for himself where the friendlies are and where the enemy is. Besides that, the pilot has to specifically identify and locate a specific target and fly the airplane so as to aim at that target. That is particularly true of targets like tanks because for hard mobile targets like tanks, if you don't aim at it, you don't kill it… This requirement for visual acquisition and this requirement for aiming the airplane at the target actually set up the design of close air support aircraft. It comes out with different features from what you would get if you designed it for the interdiction mission or the air superiority mission.[12]

The challenge has always been categorizing the point at which a hostile target constitutes a CAS target, especially today when technology allows enemy surface forces to be far removed from friendly forces and still present a hostile threat. The range of

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[12] Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force 1961-1984*, vol. II, II vols. (Maxwell Air Force Base, AL: Air University Press, 1989), 528.

some weapons and artillery allows them to be fired from locations far removed from direct contact with friendly forces and placed in static locations. This question is somewhat resolved by establishing close proximity.

Over the years, the terms used in the third component of the definition of CAS, close proximity, have remained the same, however, the distances that represent it have fluctuated. In the Air Force Manual 1-3, *Theater Air Operations*, written in 1954, close proximity referred to "the immediate zone of engagement of surface forces."[13] During this time the 1952 Pace-Finletter Memorandum of Understanding (MOU) codified the combat zone of engagement as 50-100 miles in depth.[14] A few years later in 1957, as the roles and missions argument heated up, DOD Directive No. 5160.22 rescinded the Pace-Finletter MOU and defined the combat zone as "not more than 100 miles forward of the general line of combat between U.S. and enemy ground forces…and its extension to the rear of the general line of combat…about 100 miles."[15] This distance represented where the bombline would be located, where ordinance dropped inside of it required coordination with ground forces and ordinance dropped outside of it did not. In 1965 the bombline was renamed the Fire Support Coordination Line (FSCL), although the argument was made that the FSCL was distinct from the bombline. Despite an attempt to make the function of the FSCL separate from the bombline and therefore not delineate the CAS mission, it became the dividing line between CAS missions and interdiction missions. Unlike conventional wars of the past, today's non-linear battlefield presents challenges to the definition of close proximity. Interestingly, behind the scenes there has always been an inherent understanding that close proximity equates to actions directly affecting ground forces. This understanding is apparent in an article written in 2004 as a B-1B pilot articulated some of the limitations his aircraft had in providing CAS during OEF. He said, "Perhaps our greatest limitation is our inability to positively identify

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[13] Department of the Air Force, "Air Force Manual 1-3: Theater Air Operations" (United States Air Force, April 1, 1954), 9.
[14] Alfred Goldberg and Lt Col Donald Smith, *Army-Air Force Relations: The Close Air Support Issue*, United States Air Force Project RAND (Santa Monica, California: RAND, October 1971), 11.
[15] Goldberg and Smith, *Army-Air Force Relations*, 14.

ground targets."[16] He went on to say that because of the payloads it carries, the B-1 was unable to drop in close proximity to friendly forces. There is a grey area that exists between the area of responsibility of CAS missions, dealing with "close proximity", and interdiction missions, which is concerned with "the enemy's military surface capabilities before they can be brought to bear effectively against friendly forces".[17] Therefore the final component of the definition helps to illuminate the jurisdiction where CAS is conducted.

The fourth component of the CAS definition is detailed integration. Out of all the components, detailed integration highlights where Air Force and Army cooperation is imperative. Effectively coordinating air action with ground maneuvers and artillery creates opportunities for surface forces to achieve theater objectives. When there is a lack of coordination or detailed integration there is a high likelihood of the unnecessary loss of life and treasure. Since both the Air Force and Army have suffered from instances of poor integration, detailed integration would surface as a priority. Unfortunately, this portion of the definition leads to the most contentious debates surrounding CAS. Detailed integration ends up being translated into a fight for command and control. In interdiction missions, the risk to ground forces is significantly reduced based on the proximity of the targets. The interdiction definition specifically states, "objectives that are conducted at such distances from friendly forces that detailed integration of each air mission with the fire and movement of friendly forces is not required."[18] The need for CAS missions to have detailed coordination hamstrings the perceived flexibility of the air forces, since doing so requires them to be integrated with the fire and maneuver plans of the ground forces. This drives CAS pilots to learn to speak the language of the ground forces, understand their battlefield perspective, recognize shifts in the ground order of battle and respond quickly, and to maintain a big-picture view of the air and ground players involved in affecting the fight. Being tied to the ground forces fire and maneuver plans leads the CAS force's effectiveness to be tied to the ground forces' effectiveness. CAS is a mutually dependent relationship, and the bedrock is detailed integration, to

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[16] Robert Olson, "Close Air Support's New Look: Strategic Assets Go Tactical," *Armed Forces Journal* 141, April (2004): 46–47.
[17] Armed Forces of United States, "DOD Dictionary.", 8.
[18] Armed Forces of United States, "DOD Dictionary.", 8.

ensure that, when strikes are conducted in close proximity to friendly forces, only the hostile targets are destroyed.

Historical Context

One of the early documents to codify the employment of air power was the War Department Field Manual 100-20, written in July 1943 and published a year later. A foundational concept in the document was the employment of air power for the primary purpose of gaining air superiority. The Army Air Forces stated upfront in the document, "Air Forces must be employed primarily against the enemy's air forces until air superiority is obtained."[19] This was a vital concern because the success of the land forces was directly impacted by their freedom to maneuver without disruption from enemy air attacks. Air superiority was the initial priority of air forces, and, once it was achieved, their attention could be directed at the remaining components of enemy land power and sea power. There were two ways to achieve air superiority: air forces could meet in the air and destroy one another through attrition, risking that one or more of the enemy would get through the defenses; or air forces could attack the opponent's air capability while it was still in the home nation, destroying its air assets prior to them getting airborne, therefore eliminating the threat to friendly ground forces or the civilian population. The latter was considered the strategic use of air power while the former was considered the tactical.

Air superiority was the prerequisite for the six basic tasks of combat operation air forces. These tasks were: 1) destroy hostile air forces, 2) deny the establishment and destroy hostile bases where an enemy conducts operations on land, sea, or air, 3) operate against hostile land or sea forces, location and strength threatening to vital interests of US or its Allies, 4) wage offensive air warfare against sources of strength, military and economic, 5) operate as part of the task forces in conduct of military operations, and 6) operate in conjunction or in lieu of naval forces.[20] Similar to the distinctions in how to achieve air superiority, different aircraft, based on their missions, were divided into two

[19] War Department, "Field Manual 100-20: Command and Employment of Air Power" (United States Government Printing Office, July 21, 1943), 1.
[20] War Department, "Field Manual 100-20: Command and Employment of Air Power" (United States Government Printing Office, July 21, 1943), 8.

categories to accomplish these six basic tasks; there was a strategic and a tactical air force.

Not only were the missions and platforms labeled, but strategic and tactical air forces were designated based on specific roles and specific geographical areas of operation. The strategic air forces were tied directly to the strategic plans of the War Department, giving them a global quality. Their mission reflected this broad application, with the added emphasis of defeating nation-states. The "aim of the strategic air force is the defeat of the enemy nation. Objectives may be found in the vital centers in the enemy's lines of communication and important establishments in the economic system of the hostile country."[21] On the other hand the tactical air forces were deemed a theater asset, and more specifically a theater where ground troops would be located. This placed at most a regional boundary on tactical air forces and obliged their use in joint theater operations. The tactical air forces were given three priorities to be accomplished in sequential order. Those priorities were: 1) gain necessary degree of air superiority, 2) prevent movement of hostile troops and supplies into or within the theater of operations, and 3) participate in the combined effort of the air and ground forces, in the battle area, to gain objectives on the immediate front of the ground forces.[22] Strategic and tactical air forces served distinct functions. Some senior leaders were on- board with this distinction while others argued it was a disservice for the Air Force. "Well, this was the result of the war--we were thinking along the lines of World War II," Spaatz said, "We thought this was the way that it should be organized." Some senior AAF officers objected to Spaatz's decision to split the Air Force into strategic and tactical forces. At an Air Board meeting in December 1946, General Kenney, the first SAC commander, said, "I think we are cutting ourselves into two camps that are liable to be gobbled up...I don't think that an airplane should be considered as a tactical airplane and a strategic airplane," Kenney argued, "I think it is an airplane." Major General Elwood P. Quesada, the first TAC commander, agreed in principle but thought that without the distinction, the Army might try to demand its own tactical air forces on the same grounds that the Navy had kept its

[21] War Department, "Field Manual 100-20: Command and Employment of Air Power" (United States Government Printing Office, July 21, 1943), 9.
[22] War Department, "Field Manual 100-20: Command and Employment of Air Power" (United States Government Printing Office, July 21, 1943), 16.

carrier-based forces.[23]Highlighting the distinction between the strategic and the tactical air forces provides an insight into how the Army and Air Force created their threat scenarios and the roles each played within them.

It may seem strange to use an Army Field Manual as the springboard for understanding the Air Force's view on strategic and tactical airpower. Prior to the Korean War, FM 100-20 was the only codified air power doctrine. The document represents the ideas of the Army Air Force officers who would transition to leading the newly established independent Air Force. Many believed FM100-20 was the Air Force's "declaration of independence."[24] There was even Army resistance to its publication based on placing the use of tactical air forces in direct support of ground forces as the last priority.[25] The allocation of terms, roles, and missions within this document reflects the thinking on the purpose and use of air forces prior to 1950, was foundational to the roles and missions assigned to the independent Air Force, and remains relatively intact today, especially regarding CAS.

On September 17, 1947 the Army Air Forces achieved its long-sought independence from the Army, forming a separate Air Force. In early 1944, during the post-war planning, an initial recommendation from several senior military leaders advocated for more integrated armed forces consisting of a unified command of "a single secretary of war with four assistant secretaries of the ground forces, air forces, naval forces, and combined bureau of war resources."[26] Following years of Congressional hearings, studies, and conferences, the National Security Act of 1947 created the National Military Establishment where the Air Force, Army, and Navy were co-equal departments run by the newly assigned Secretary of Defense. An executive order followed in short sequence outlining the Air Force's functions. The executive order mirrors the FM 100-20 prescription for the use of air forces. The functions are to organize, train, and equip air

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[23] Warren A. Trest, *Air Force Roles and Missions: A History* (Washington, D.C.: Air Force History and Museums Program, 1998), 114.
[24] Phillip J. LaSala, ed., *Air and Space Power Theory and Doctrine*, 3rd ed. (New York, New York: Forbes Custom Publishing, 1999), 31.
[25] Caroline F. Ziemke, "In the Shadow of the Giant: USAF Tactical Air Command in the Era of Strategic Bombing, 1945-1955" (Dissertation, Ohio State University, 1989), 31.
[26] Futrell, *Ideas, Concepts, Doctrine*, 191.

forces for: a) air operations including joint operations, b) gain and maintain general air supremacy, c) establish local superiority, d) the US strategic air force and strategic air reconnaissance, e) air lift and support for airborne operations, f) air support to land forces and naval forces, including support for occupation forces, g) air transport of armed forces (expect for Naval assets capable of transporting themselves).[27] This executive order evidently distinguishes types of air forces. The specification of strategic air and the divisions of airlift, air support, and air transport for the different services speaks to the strategic and tactical construct as well as global and theater jurisdictions. Regrettably, the executive order did not provide sufficient clarification on the dividing line between Air Force and Naval aviation assets.

Within a year of his appointment, Secretary of Defense James Forrestal hosted the Joint Chiefs of Staff at two separate conferences to decide the roles and missions of each Service. The resulting document, *Functions of the Armed Forces and Joint Chiefs of Staff*, "specified that the Army has primary interest on land, the Navy in operations as sea, and the Air Force in operations in the air."[28] The original executive order was expanded, specifying the Air Force's primary roles as, "defense of the United States against air attack; air supremacy or local air superiority; to be responsible for strategic air warfare; organize, train, and equip Air Force forces for joint amphibious and airborne operations and provide for their training; to furnish close combat and logistical air support to the Army; to provide air transport for the Armed Forces; develop in coordination with other Services, doctrines, procedures, and equipment for air defense from land areas, including the continental U.S."[29] Once again there was a distinct classification of strategic air and the air in support of Army or Naval operations. Strategic air warfare consisted of "destruction or disintegration of the enemy's war-

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[27] Harry S. Truman, *Executive Order 9877: Functions of the Armed Services*, 1947, accessed March 22, 2014, http://www.trumanlibrary.org/executiveorders/index.php?pid=847&st=Air+Force&st1=.

[28] Futrell, *Ideas, Concepts, Doctrine*, 198.

[29] James Forrestal, *Functions of the Armed Forces of the Joint Chiefs of Staff*, Memorandum from Secretary of Defense, J.C.S 1478 Series (Washington, D.C.: Joint Chiefs of Staff, April 21, 1948), 11.

making capability to the point where he no longer retains the ability to wage war."[30] All of the other roles the Air Force held to include air superiority were associated with land or naval forces either transiting to or operating in theater. The roles and missions presented in 1944 in FM 100-20 and reiterated in 1948 in the Key West and Newport agreements provide the foundation for how the Air Force views the role of CAS.

In the years preceding the Korean War the Air Force and Army viewed CAS from different perspectives. The Air Force rarely used the term close air support; instead it was common to lump air superiority, interdiction, and support of ground troops into the unifying terms" tactical air power" or "tactical air forces."[31] The Army, on the other hand, used the term tactical almost exclusively as a synonym for close air support. This difference highlights the unique perspective each Service had when approaching the CAS mission. Wrapping the CAS mission up into the tactical air force, the Air Force could quickly establish a hierarchy of missions. Air superiority would always be considered a prerequisite, because it was an enabler to all the other air-to-ground missions. Then following Air Force logic, if tactical air forces could destroy, delay, or deny enemy forces from making contact with friendly ground forces through interdiction missions, the Army would not have to face its opponent. Only if the Air Force were to fail in its ability to halt the enemy would the Army be forced to fight; and therefore, CAS would be an emergency mission required to relive the beleaguered ground forces. This demonstrates the reason why the Air Force has been reluctant to view CAS as a priority.

Similar to the probability of "leakers" making it through the counterair forces, the Army recognized the likelihood of enemy ground forces making their way through the air forces' interdiction campaigns. This could be because the opponent goes on the offensive before an interdiction campaign can be initiated, as in the Korean War, or because the opponent is part of an insurgency conducting guerrilla warfare in Vietnam or Afghanistan, or because the Army sought the initiative and attempted an offensive strategy prior to Air Force execution as in OIF. Whatever the conditions, the Army anticipates making contact with the enemy and therefore desires fire support to maximize

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[30] Forrestal, *Functions of the Armed Forces of the Joint Chiefs of Staff*, 14.
[31] John Schlight, *Help From Above: Air Force Close Air Support of the Army 1946-1973* (Washington, D.C.: Air Force History and Museums Program, 2003), 56.

its potential for success. Seeing the war from this perspective, it is understandable why ground forces consistently crave CAS.

Summary

The Air Force and Army have a long and storied history with the CAS mission. The upcoming case studies present a historical journey of this relationship based on the Services' view of the most-dangerous threat and their individual roles in countering it. The intent in dissecting the CAS definition was to provide a foundational understanding of who conducts CAS, against what objectives, where, and under what conditions. It was also necessary to provide a glimpse into how each Service's view of CAS from a particular vantage alters the perspective from which it approaches the mission. The Air Force will look at CAS through the interdiction lens, seeing it as the result of a failure to affect the battlefield prior to the ground forces making contact and as a strictly tactical endeavor. The Army will see it as a natural part of the dynamics of war. The ability to have an increased amount of firepower at its disposal maximizes its potential for success. Approaching the potential conflict and most-dangerous scenarios with a different perspective on CAS adds a layer of complexity to the ability for the Air Force and Army to cooperate in this deadly endeavor.

Chapter 4

Cold War Ignites: The First Brushfire in Far East Asia 1945-1950

Technical proficiency, operational effectiveness and technological capabilities do not suffice in war. Without a strategic vision that turns out to be the right one (or a right one), these become phantom victories leading to a final spectacle of defeat or stalemate.

- Donald J. Mrozek

Introduction

This chapter examines the years following World War II through the start of the Korean War. Testing the theoretical framework proposed in Chapter 2 starts with a brief survey of the global events that transpired following World War II. Politicians and military leaders were not operating in a vacuum, they were responding to aggressive actors moving pieces on the international chessboard. This historical overview presents how the nation's most-dangerous threat was perceived. It is from this perception that the Air Force and Army derive their most-dangerous scenarios. The historical review will also reveal that the Air Force was confronted with many triggers, placing it in state of crisis for the majority of this five-year period. The cumulative effect of the crises rooted the Service in the implemental mindset, leading the Air Force to cling to its most-dangerous scenario and the role the Air Force would play in countering the opponent. The reaction to crises created conditions for both cooperation and conflict between the Air Force and Army with regard to tactical air forces and close air support.

Strategic Landscape

By mid-August of 1945 the world had dramatically changed. The war in Europe had come to an end after over five years of turmoil, death, and destruction. In Asia, Japan was a shadow of its former self. It had tickled the dragon and been nearly consumed by the fire of another beast. China was shifting from conflict with Japan back to a civil war. The United States and the Soviet Union found themselves standing toe-to-toe in the middle of Germany. Finally, the atomic bomb had erupted on the international scene, changing the military calculus of the remaining powers. Some would expect that, after the experiences of WWI and WWII, states would recoil from conflict and there

would be a global pause from competition. This would not be the case, as nations continued to seek influence and power.

Despite its ascendance to superpower status, the United States was vulnerable. Technology had condensed the world, and retreat to isolation was no longer an option. The United States recognized it could not afford to sit on the sideline of international politics. It had to participate, especially in Europe and Asia.[1] The United States had secured a large share of the global wealth following the war and retained the best economic position relative to the other nations. The production of war material had hit an all-time high near the end of the war, since the infrastructure had been immune to enemy attack, strengthening the military. The technological advantage afforded by owning the only nuclear weapon gave the United States a military capability unmatched by another nation. Even with these economic and military advantages, the United States and its allies were still vulnerable to attack; and the fear of external threats, both present and future, remained.

One solution was to bind as many nations together in order to outsource the vulnerability and deter threats from challenging any single nation individually. In June 1945, the international agreement of 46 nations created the structure for collective security establishing the United Nations, an international body championed by the US.[2] "The second instrument was the regional military alliance, allowed by the UN Charter, signing the Inter-American Treaty of Reciprocal Assistance (The Rio Pact) on Sept 2, 1947, binding [the US] with 19 other nations for the defense of the Western Hemisphere."[3] NATO was another example. These institutions were visible representations of the cleavages on the European continent between East and West. They also marked a departure in traditional American behavior, which had for the past century and half eschewed the entanglement of alliances and relied on the vast expanse of two oceans to ensure its safety. The oceans were still there, but the Americans themselves

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[1] Robert S. Ross, "US Grand Strategy, the Rise of China, and US National Security Strategy for East Asia," *Strategic Studies Quarterly* 7, no. 2 (Summer 2013): 25.
[2] Allen R. Millet and Peter Maslowski, *For the Common Defense: A Military History of the United States* (New York, New York: The Free Press, 1984), 472.
[3] Millet and Maslowski, *For the Common Defense,* 472.

had developed an intercontinental bomber during the war, and the technology seemed well within the potential grasp of their Soviet opponents.

The United States and its post-war allies were leery of their wartime Soviet partner well prior to the conclusion of hostilities. There was a foundational mistrust among these nations due to the ideological differences between communism and capitalism. Questions of Stalin's post-war intentions arose in the State Department, and his behavior in Eastern Europe did little to allay fears of aggressive communist expansion. These inquiries prompted George F. Kennan, Foreign Service officer in Moscow, to respond in February 1946 with his infamous 8,000-word telegram.[4] As the Soviets began to display aggressive pursuits within Europe, they became a legitimate security concern. The first indication was Stalin's reluctance to evacuate the northern portion of Iran. Britain and the Soviet Union had agreed to remove all troops by May 1946, but when the time came, the Soviets remained in place and supported the separatist regime, challenging the new Iranian government.[5] The United States took the issue to the newly formed United Nations Security Council, elevating the incident to the international arena, and deployed the American Sixth Fleet to the Mediterranean.[6] Shortly after the Soviets withdrew from Iran, however, they quickly shifted to intimidate the Turkish government with a few dozen tanks on the Turkish border and a demand for joint custodianship of the Turkish Straits.[7] These two events, along with the ongoing civil war in Greece, sparked President Truman's hypothesis of the "domino theory." The fear was that a nation under the governance of communism would spread the virus to the bordering nations. These sentiments were later codified in the NSC-68 published in 1950; "The Soviet Union, unlike previous aspirants to hegemony, is animated by a new fanatic faith, antithetical to our own, and seeks to impose its absolute authority over the rest of the world."[8] The panic of communist expansion based on the domino theory and

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[4] John Lewis Gaddis, *The Cold War: A New History* (New York, New York: Penguin Group, 2005), 29.
[5] Neil Sheehan, *A Fiery Peace in a Cold War: Bernard Schriever and the Ultimate Weapon* (New York, New York: Vintage Books, 2009), 85.
[6] Gaddis, *The Cold War*, 28.
[7] Sheehan, *A Fiery Peace in a Cold War,* 86.
[8] Harry S. Truman, "NSC-68" (Executive Secretary, April 12, 1950), 4.

the aggressive actions of the Soviets and Greek communists were foundational to the United States establishing the Soviet Union as its most-dangerous threat.

The United States devised a national security strategy aimed to contain communist expansion. This strategy had both an economic and a military component. The economic component was reflected in the Truman Doctrine, which would eventually become the Marshall Plan. In 1947, the United States contributed $300 million in aid to Greece to defeat the communist-led guerrillas and $100 million to Turkey.[9] Surprisingly, the act of sending military advisory committees along with financial aid to assist the Greek army against communist forces was not understood to be a sign of future military engagement in remote areas under this containment strategy. The expansion of the Truman Doctrine was coined the Marshall Plan, which increased economic generosity by providing $13 billion to Western European nations in an effort to bring their economies back to life.[10] American action to jumpstart the economies of Europe inflamed Stalin, who perceived it as an effort to "undermine his East European security corridor."[11] This led Stalin to encourage the Communists in Czechoslovakia to seize power in February 1948. The Western Allies also began to consolidate their power; and, with the economic progress spurred by the Marshall Plan, Britain, France, and the United States initiated a West German currency reform. In an attempt to strengthen Europe, the Allies had weakened relations with the Soviet Union.

The USSR associated the currency reform with the consolidation of power aimed to threaten Soviet occupation and influence over East Germany and Eastern Europe. In response, on June 24, 1948, the Soviets "blockaded all road and rail lines into Berlin across the 110 miles of their occupation zone."[12] The United States and Soviet rivalry, which started from the Iranian contention, peaked just over a year later in the heart of Europe. Although the United States still had over 90,000 troops stationed in Europe, the numbers were considered insufficient to counter the Soviet Union's conventional

[9] Sheehan, *A Fiery Peace in a Cold War*, 90.
[10] Millet and Maslowski, *For the Common Defense*, 474.
[11] Sheehan, *A Fiery Peace in a Cold War*, 93.
[12] Sheehan, *A Fiery Peace in a Cold War*, 95.

military.[13] The United States relied on its possession of the atomic bomb to serve as the military cornerstone of the security strategy. Leaders relied on the bomb to provide a deterrence capability. The theory was tested and the efficacy of the containment strategy challenged when the United States refused to evacuate West Berlin. For 16 months, from June 1948 through September 1949, American, British, and French air forces flew over 280,000 flights and 2.3 million short tons to deliver goods to sustain the military contingent and civilians located in West Berlin.[14] The United States continued to wield a mighty sword as the sole owner of atomic weaponry and reinforced the strategy of containment through atomic diplomacy.

Europeans on the verge of recovery were watching the standoff of two superpowers occurring in the heart of the continent. "European recipients of American economic assistance were convinced they needed military protection as well: [leading] them to request the creation of a North Atlantic Treaty Organization" (NATO).[15] With the establishment of NATO in April 1949 and tensions dissipating from the Berlin Crisis, the United States gained confidence in its strategies and decisions. This construct of collective defense offered Europe a recovery under the American umbrella of nuclear weapons. Before the United States and NATO could get too comfortable, however, the Soviet Union tested its own atomic bomb. In August 1949, three years before the United States predicted, the Soviets had attained near military equality. Truman was now forced to address the fact that United States' conventional forces were scarce and would be unable to counter Soviet forces head-on in Europe. In rapid sequence, the United States faced another strategic challenge in October 1949, when Mao Zedong and the Chinese communists defeated Chiang Kai-shek and the Chinese nationalists, forcing them to flee to Taiwan.[16] Demonstrating solidarity, the Chinese and Soviets mirrored the European efforts of NATO by signing the Soviet-Sino Treaty in December 1949.[17] Several other countries in the East were pursing the same path as the Chinese, where guerillas in

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[13] Robert G. Miller, *To Save a City: The Berlin Airlift 1948-1949* (College Station, Texas: Texas A&M University Press, 2000), 29.
[14] Miller, *To Save a City*, 201.
[15] Gaddis, *The Cold War*, 34.
[16] Gaddis, *The Cold War*, 36-37.
[17] Gaddis, *The Cold War*, 39.

French Indochina, the Philippines, Malaya, the Dutch East Indies, and Burma fought for an Asian version of Marxism.[18] The culmination of these events, transpiring since August 1945, shaped how the political leaders of the United States viewed the nation's enemies and the necessary response.

Lacking the atomic superiority, conventional equivalency, and the global footprint necessary to enable the containment strategy, Truman and his administration were forced to reassess the strategy's efficacy. In January 1950, President Truman directed the Secretary of State and Secretary of Defense "to undertake a re-examination of our objectives in peace and war and of the effect of these objectives on our strategic plans."[19] The appearance of Soviet nuclear capability confirmed the United States' designation of the Soviet Union as the nation's primary enemy. Interestingly, although the Soviet Union was the enemy, communist ideology was the threat. The NSC-68 married the fundamental design of the Soviet Union with the international communist movement.[20] This correlation led the United States to view the Soviet Union's intentions as "complete subversion or forcible destruction of the machinery of government and structure of society in the countries of the non-Soviet world and their replacement by an apparatus and structure subservient to and controlled from the Kremlin."[21] The United States' role, foreign policy, and alliances to the United Nations and NATO stiffened the requirement to supply a military force capable of defeating the Soviet Union and restricting the spread of communism.

According to NSC-68, the Soviet Union did not seek to destroy the United States for its own ends, but by pitting liberal capitalism against socialism, the United States became a threat to the Kremlin achieving its fundamental design, the spread of communism.[22] The presence of the United States in Europe, the Middle East, and the Pacific presented pockets where conflict could emerge. The military capability resident in the Soviet Union was assessed to be able to carry out several campaigns. These included overrunning Western Europe, a drive toward oil-bearing areas of the Near and

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[18] Millet and Maslowski, *For the Common Defense*, 475.
[19] Truman, "NSC-68.", 3.
[20] Truman, "NSC-68.", 6.
[21] Truman, "NSC-68.", 6.
[22] Truman, "NSC-68.", 7.

Middle East, and consolidating Communist gains in the Far East.[23] It was also anticipated the Soviet Union could launch air attacks against Britain and attack targets in Alaska, Canada, and the United States with atomic weapons while conducting anti-access and aerial denial of the European continent.[24] In January 1950, Secretary of State Dean Acheson gave a speech to the national press club where he articulated the United States' role in combating Soviet aggression as well as the rest of the world. He stated, "Should such an attack occur – one hesitates to say where such an armed attack could come from – the initial reliance must be on the people attacked to resist it and then upon the commitments of the entire civilized world under the Charter of the United Nations which so far has not proved a weak reed to lean on by any people who are determined to protect their independence against outside aggression."[25] He went on to provide specifics on the United States military role in the Pacific, drawing a defensive perimeter from the Ryukys to the Philippines. This speech publicized the United States' commitment to defending specific interests in the Pacific as well as obligating the United States to respond to aggression under the UN Charter. Importantly, Korea was left outside the perimeter of vital United States interests.

In the five years following WWII, the United States' strategic threat had emerged and was codified. The April 1950 NSC-68 report summarized this by establishing communist ideology perpetuated and expanded by the Soviet Union as the most-dangerous threat to the United States. The events in Iran, Turkey, Czechoslovakia, Berlin, and China fostered a two-sided conflict with freedom and democracy on one side and communism on the other. In an effort to bolster the security of Western Europe and militarily weak countries around the world, the United States erected the UN and NATO. Aligning the nation to these organizations along with declaring that "the defeat of free institutions anywhere is a defeat everywhere," bound the United States' national security

[23] Truman, "NSC-68.", 17-18.
[24] Truman, "NSC-68.", 18.
[25] Dean Acheson, "Secretary Acheson and the Defense of Korea," Elsey Papers, 1950, 1, accessed March 19, 2014, http://www.trumanlibrary.org/whistlestop/study_collections/koreanwar/documents/index.php?documentdate=1950-00-00&documentid=kr-3-13&pagenumber=1.

strategy to containing Soviet and satellite state aggression world-wide.[26] The challenge of ensuring the nation had the capability to match the rhetoric was placed in the hands of the military institutions.

Most-Dangerous Scenarios

The theoretical construct put forward by this paper argues that the Air Force and Army, aware of the defined national threat, devised distinct most-dangerous scenarios relative to their individual domains. This materialization provided each service the gauge from which to organize, train and equip. The Service's purpose and roles within the operating domain further influenced the construction of the most-dangerous scenario. Therefore, the combination of national security concerns with the Services' perceived purpose and roles determined what the Air Force and Army viewed as the most-dangerous scenario. The previous section identified how the national security threat was conceived prior to the Korean War. The next section uncovers the Air Force and Army's most-dangerous scenario for the same time period.

Air Force

The experiences of WWII had a significant impact on the United States military, and specifically the Army Air Forces. Security based on the isolationist, defensive mentality was shattered by the attack on Pearl Harbor. The requirement to fight on geographically separated fronts in Europe, North Africa, and the Pacific demonstrated the need to operate globally in diverse environments. The rapid advance of battlefield technologies and the inclusion of aircraft across the spectrum of operations augured future joint missions. These circumstances led military leaders to question the true purpose and structure of the United States armed forces. In late 1943, Major General Thomas T. Handy, Director of the War Department Operations Division submitted a paper outlining the primary function of the armed forces. He stated, "When called upon to do so, [the armed forces] support and, within the sphere of military effort, enforce the national policy of the nation."[27] Tying the armed forces to national policy was a

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[26] Truman, "NSC-68.", 8.

[27] Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force 1907-1960* (Maxwell Air Force Base, AL: Air University Press, 1989), 201.

relatively new concept in the Unites States. Previously, having a military force in being was viewed as a threat to the republic. The experiences of WWII elevated the fear of external attack above the fear of an internal military coup, allowing the justification for organizing, training, and equipping a strong military force during times of peace. The challenge was connecting the individual roles of each Service of the armed forces to the national strategy.

The Army Air Force codified its link to the national strategy in July 1943 by crafting the Army Field Manual 100-20, *Command and Employment of Air Power*. The nature of classifying air forces and missions as strategic or tactical came from an Air Force tendency to view threats through either a global or theater lens. Strategic air, pursuing the opponents' war making capability, operated isolated from land and naval forces. The national opponent, the Soviet Union, was viewed through the strategic-targeting lens. This perspective was the foundation for devising and planning for the most-dangerous scenario. Chief of the Air Staff in 1943, Major General Barney M. Giles, established the ground rules for planning by developing an 'M-day' air force, "instantly ready to repel attack or to quash any incipient threat to world peace."[28] It was incumbent on the Air Force to be able to provide a swift blow to the opponents on their territory. Military leaders acknowledged that the Soviets' conventional military capability and presence in Eastern Europe was numerically superior to the United States. A strategic or global perspective could overcome the tactical and theater-level problem. General Carl Spaatz stated in May 1946, "The surest defense will be our ability to strike back quickly with a counteroffensive, to neutralize the hostile attack at its source, or to discourage its continuance by striking at the vitals of the aggressor."[29]

The Air Force determined that the most-dangerous scenario was the inability for it to respond rapidly to and halt an aggressive strike by the Soviet Union by successfully targeting vital war-making capabilities within Soviet territory. The Clifford-Elsey Report specifies, "The Soviet Union's vulnerability is limited due to the vast area over which its key industries and natural resources are widely dispersed, but it is vulnerable to atomic

[28] Futrell, *Ideas, Concepts, Doctrine*, 202.
[29] Futrell, *Ideas, Concepts, Doctrine*, 214.

weapons, biological weapons, and long-range air power."[30] Disruption or destruction of industrial target sets deep within the Soviet Union were necessary to buy the theater ground forces time and erode the Soviets' will to fight. The Air Force relied on the destructive power of the nuclear arsenal carried by long-range bombers for successfully countering its most-dangerous scenario. This remained the Air Force's *idee fixé* throughout the period between WWII and Korea. NSC-68 reinforced the importance of this pursuit, "A very serious initial blow could so reduce the capabilities of the U.S.S.R. to supply and equip its military organization and its civilian population as to give the United States the prospect of developing a general military superiority in a war of long duration."[31] The report went on further to emphasize how the use of atomic weapons was necessary to improve the effectiveness of the strike. Too, if the Air Force could not target Soviet atomic capabilities prior to their departure from Soviet territory, the Soviet Union would add to the conventional advantage it already carried.

Army

The completion of WWII brought enormous changes to the Army. The majority of the eight million men mobilized for the war would be discharged. By 1947 the Army retained only 7% of its wartime personnel totaling 684,000.[32] The Army went from 89 divisions in 1945 down to 10 by 1948.[33] Despite the rapid demobilization, Army units were assigned to Europe and the Pacific to maintain security and provide an occupational presence during the peacetime transition. "By the autumn of 1945, military planners were already worrying that Soviet control over much of Eastern Europe and its raw materials would abet Russia's economic recovery, enhance its war- making capacity, and

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[30] Clifford, *American Relations with the Soviet Union*, Conway Files, Clifford-Elsey Report (Washington, D.C.: Truman Papers, September 24, 1946), 71, accessed March 31, 2014, http://www.trumanlibrary.org/whistlestop/study_collections/coldwar/documents/pdf/4-1.pdf.

[31] Truman, "NSC-68.", 37.

[32] William W. Epley, *America's First Cold War Army: 1945-1950*, Land Warfare Paper No. 32 (Washington, D.C.: The Institute of Land Warfare: Association of the United States Army, August 1999), 6-7, 9.

[33] Epley, *America's First Cold War Army*, 9.

deny important foodstuffs, oil, and minerals to Western Europe."[34] The presence of a multitude of Soviet forces in Eastern Europe was a constant reminder of the Army's inadequate manpower available to stifle this threat. Domestic pressures mandated a significant reduction in the standing Army, and it was believed there was another way to combat the Red Army. The Army shared the foundational belief at the time that the atomic weapon would replace manpower with firepower, offsetting the number of active Army personnel, and, if necessary, allows the reserve force time to mobilize.

This led to a universal reliance on the atomic weapon, which implied that the next war would be a total war. The Unites States expected the Soviets to be the aggressors and reasoned the Army was undermanned to hold off an attack. Since a United States response would entail a retaliatory nuclear attack, the war would escalate to total war. This was spelled out in the War Department's basic plan, where it was "assumed that for the next war, the actual attack will be launched upon the United States without any declaration of war; that the initial attack will represent an all-out effort on the part of the enemy; that the war will develop into total war."[35] Leaders inside and outside the military relied on the Air Force to inflict massive damage to the enemy prior to the start of a ground campaign. The United States senior leaders held multiple theories about how the Soviet aggression would transpire. It wasn't until the Iranian contention that war plans were drafted in response to where Soviet aggression would most likely occur.

The Army readily stated that the Soviet Union was the enemy, but to the ground forces it was not the only threat, albeit it was becoming the most dangerous. The Soviet Union's capabilities and presence were just one of the destabilizing forces making Europe and the Middle East expected battlegrounds. Assessments pointed to the severe economic depression and political vacuum that had developed from WWII and opened up the possibility for the Soviet Union to take advantage of weaker states.[36] When it came to the near threat, it was anticipated that food shortages would cause civil unrest, opening the door to Soviet aggression. With this perspective, the Army figured it would have

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[34] Melvyn P. Lefflar, "The American Conception of National Security and the Beginnings of the Cold War, 1945-1948," *The American Historical Review* 89, no. 2 (April 1984): 357.
[35] Epley, *America's First Cold War Army*, 15.
[36] Lefflar, "American Conception of National Security.", 365.

some warning; and therefore, its initial role in Europe was to assist the civilian population and repel any form of a ground attack while it mobilized personnel for follow-on ground phases. For this reason, "there was no attempt to define the need to confront the Red Army with a ground army."[37] The Army still considered defense of the United States its primary role and mission. Possession of the atomic bomb furthered this belief: "No nation would risk war with the United States without they themselves possessing this weapon or one of equal capability."[38] The Army had time on its side.

Aggressive Soviet actions in Europe following 1948 and even their acquisition of the atomic bomb did not appear to change the Army's planning assumptions. These developments only intensified the belief that European unrest would spark conflict. The territorial United States became the focus of a traditionally defensive force. The Army agreed that following the initial attacks by the Soviets, America would need to respond with nuclear bombers. This counterattack would buy the Army time to resist initial unrest, halt advancing troops, retrograde, and generate the ready-reserve force. The war plans drafted by the Joint Chiefs of Staff give insight into the reliance on Air Force nuclear capability to halt initial Soviet attacks. The first plan, devised in 1946, simulated a response to Soviet attacks on United States allies along its periphery. The Air Force would deliver 196 atomic bombs on 20 urban centers in the Soviet Union.[39] The military planners were unaware that only 9 atomic bombs existed in the weapons stockpile at this point. The next plan, PINCHER, was devised to account for a Soviet invasion of oil fields in the Middle East with a simultaneous invasion of Western Europe. The Soviets were assessed to have 197 troop divisions at their disposal in Europe compared to 17 United States Army divisions.[40] Although the Soviets had a large presence in Europe, logistical constraints limited their ability to execute a surprise attack or even an extended attack across the continent.[41] Knowing there was time to respond, planners accounted for

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[37] Epley, *America's First Cold War Army*, 15.
[38] Stephen Budiansky, *Air Power: The Men, Machines, and Ideas That Revolutionized War, from Kitty Hawk to Gulf War II* (New York, New York: Penguin Group, 2004), 348.
[39] Phillip S. Meilinger, "The Early War Plans," *Air Force Magazine* 95, no. 12 (December 2012): 47.
[40] Meilinger, "The Early War Plans", 48.
[41] Lefflar, "American Conception of National Security.", 361.

Army personnel retrograding as necessary while Air Force bombers conducted punishment attacks on Soviet soil to allow ground-force reinforcements to arrive. This baseline scenario was embedded in the next two war plans, BUSHWACKER and HALFMOON, and persisted through the start of the Korean War.

The Army's most-dangerous scenario was combating Soviet enterprises designed to take advantage of political or economic unrest in Europe; and, if it failed, suffer the fate of being overrun by the numerically superior Soviet forces in the European theater before it could be reinforced or evacuated. The Army did not predict engaging the Soviet Red Army without provocation; it was assumed American troops would be responding to Soviet aggression. There was no plan for defeating the Soviets or pushing out of Western Europe, given the land forces available to the United States and its allies. Besides serving as an occupational force, the main strategic aim of the Army was to provide stability. It held a purely defensive position aimed at retaining a degree of European occupation. The interesting thing about this perception is the underlying inevitability it carries with it. The war plans emphasize the Army's vital dependence on the Air Force atomic capabilities and strategic mission to halt Soviet movement. The success of the Air Force effort was necessary to preclude an Army defeat, buying it time to allay unrest and respond to aggression by Soviet forces. Hence, a Soviet land-force attack on Western Europe was the Army's most-dangerous scenario and the fulcrum of its planning and force posture.

Elements of each of the Services' most-dangerous scenarios overlapped. The Air Force's role involved flying strategic bombers to carry nuclear weapons to targets in the Soviet Union. The Army expected that nuclear attacks on Soviet war-making facilities would give pause to the Red Army in Europe, granting the American ground forces time. The Air Force was ultimately attempting to prevent follow-on attacks to Allies and eventually the United States. The Army was focused on a general withdrawal to return home to defend the United States from attack. The Air Force and Army's different scenarios and distinct roles tended to view crises differently. With these perceptions, how the Services chose to respond to these crises impacted their degree of cooperation or conflict.

Crisis

Revisiting the theoretical framework, this section examines the events triggering various crises from the end of WWII to Korea. Even in such a short period, there was an enormous amount of change domestically and internationally. Every Service was affected, but in this study it is important to analyze how the triggers affected the Air Force, thereby impacting its ability to cooperate in the CAS mission. Three primary triggers arose during this timeframe and which developed into crises for the Air Force. The individual and cumulative impact of the crises propelled the Air Force into an implemental mindset, rooting its perceived most-dangerous scenario and roles deep within the mental faculties dictating the organization's response. James Forrestal witnessed this as the first Secretary of Defense. He argued, "a seemingly endless series of crises abroad, rising international tensions, and concern over a domino effect from Soviet expansionist tendencies all had one thing in common: the potential to involve the U.S. military at a time when its capabilities were stretched to the limit."[42]

A crisis is triggered when the Service perceives a sense of urgency, uncertainty, and a threat to its basic values relative to its perception of the most-dangerous scenario. Certain geopolitical events, such as the Berlin blockade and Czechoslovakian communist coup, created uncertainty for the nation and political leaders; however, since they did not directly threaten the Service's most basic values they are not under examination in this section. The triggers examined here are events that satisfied all three criteria of creating uncertainty, urgency, and posed a threat to the most basic values, which in turn impacted the assumptions of the Services' most-dangerous scenario and the roles they determined as vital to combat the threat in the given scenario.

Before the discussion continues, it is important to address the complex relationship between the two Services. In March 1942, the War Department Circular 59 gave the Army Air Forces co-equal status with the Army Ground Forces and Support

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[42] Jeffrey A. Larsen and Erin R. Mahan, *Establishing the Secretary's Role: James Forrestal*, Cold War Foreign Policy Series (Washington, D.C.: Officer of the Secretary of Defense, June 2011), xii, accessed March 15, 2014, http://history.defense.gov/resources/SpecStudy1.pdf.

Forces.[43] Although the Air Force had not separated from the Army, the thinking among the Air Force officers was autonomous and distinct from the ground forces. This led to consistent views on air power and its purpose throughout the transition to an independent Service. The most-dangerous scenarios and the assessed threat also remained consistent through the transition from the Army Air Force to an independent Air Force. Therefore, when appropriate based on dates, the air service will be referred to as the Army Air Force or the Air Force. However, with a stable organizational vision and purpose during this period, they are considered one institution.

In review, the Air Force perceived its most-dangerous scenario following WWII as the need for it to respond rapidly to Soviet aggression by targeting war-making capabilities in their home territory. The resources made available would limit the speed and scale of the Air Force's response. The Army perceived its most-dangerous scenario as being overrun on the European continent before the troops were evacuated or reinforced. These scenarios were derived from the designation of the Soviet Union as the primary threat. Both the Air Force and the Army relied on aircraft and the employment of atomic bombs deep into the Soviet Union to deter or degrade further Soviet aggression and attacks. In 1946 the Joint Chief of Staff stated, "Experience in the recent war demonstrated conclusively that the defense of a nation, if it is to be effective, must begin beyond its frontiers. The advent of the atomic bomb reemphasizes this requirement. The farther away from our own vital areas we can hold our enemy through the possession of advanced bases, the greater are our chances of surviving successfully an attack by atomic weapons and of destroying the enemy which employs them against us."[44] NSC-68 reiterated this sentiment; "If war should begin in 1950 we have military capability to conduct defensive operations in the Western Hemisphere and powerful air offensive operations against vital elements of the Soviet war-making capability."[45] A presidential Air Policy (Finletter) Commission and similar Congressional Aviation Policy Board led

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[43] Richard I. Wolf, *The United States Air Force: Basic Documents on Roles and Missions* (Washington, D.C.: Office of Air Force History, 1987), 2.
[44] Melvyn P. Lefflar, "The American Conception of National Security and the Beginnings of the Cold War, 1945-1948," *The American Historical Review* 89, no. 2 (April 1984): 350.
[45] Truman, "NSC-68.", 32.

by Senator Owen Brewster both reported in 1948 that the threat of nuclear retaliation was the cornerstone of defense policy.[46] Military leaders anticipated improvements in Soviet military capabilities; however, the War Department estimated it would take "five to ten years to develop a strategic air force…three to ten years to acquire an atomic bomb, and an unspecified number of years to remove the vulnerability of the Soviet rail-net and petroleum industry to long-range bombing."[47] Triggers soon began to appear, however, unraveling planning assumptions and challenging the Air Force's ability to respond to its most-dangerous scenario.

Strategic Capabilities

The Soviet air force doctrine during WWII did not push the need for long-range bombers. In the early post-war years, the aircraft in their inventory limited the Soviets' global reach. Absence of a strategic bomber reduced the likelihood of a Soviet Union attack on the continental United States. A crisis occurred in early April 1946 when two members of the United States' Military Attaché's office spotted an unmarked airplane with an uncanny resemblance to the B-29 flying over Moscow.[48] The apparent Soviet acquisition of this long-range capability directly affected the Air Force's most-dangerous scenario.

The appearance of the Soviet heavy bomber created uncertainty, urgency, and a threat to the Air Force's basic values. A report issued in the fall of 1945 underestimated the "Soviet's ability to develop "trans-ocean missiles" and "B-29 type" bombers, putting that possibility beyond 1950, while at the same time it projected the likelihood of later Soviet capabilities for attack against the United States."[49] It was not certain whether the aircraft seen over Moscow was an American B-29 originally "taken hostage" in 1944 upon a forced landing on return from a mission to Japan, or one of Soviet manufacture. If the Soviets had manufactured their own, there was the potential they had more in

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[46] Millet and Maslowski, *For the Common Defense*, 477.
[47] Lefflar, "American Conception of National Security.", 361.
[48] Jeffrey G. Barlow, *Revolt of the Admirals: The Fight for Naval Aviation 1945-1950* (Washington, D.C.: Government Reprints Press, 2001), 83.
[49] United States Army, *History of Strategic Air and Ballistic Missile Defense, Volume 1 1945-1955*, Special Studies Series (Washington, D.C.: U.S. Army Center of Military History, 1975), 9.

inventory. This uncertainty drove an urgency to determine the true capability of Soviet air forces and the extent of their global reach. In December 1946 it was confirmed the Soviets had manufactured their own B-29s (TU-4s) and it was assessed they could have "150 B-29 heavy bombers by 1 January 1947, 1,000 by January 1948, and 2,550 by 1 January 1949."[50] Even the advent of one B-29 was viewed as a threat to the Army Air Force's basic values, and the potential for a fleet of thousands magnified that threat. In the event, the Army Air Force could not rely on the air bases located in Britain and Europe to execute the long-range retaliatory strikes to the heart of the Soviet Union. The Soviet TU-4s now posed a threat to these basing options and the Air Force's ability to execute its war plans. In conjunction with this crisis, in August 1949, Yugoslavian pilots shot down two C-47 transports sparking the need for the Air Force to demonstrate its bomber capability. Unfortunately, SAC only had two operational groups combat ready.[51]

Budget

The military returned from WWII to dramatic cuts in the Service budgets and a massive demobilization. The 1947 and 1948 fiscal limits placed upon the newly organized Defense Department triggered another crisis. President Truman had cut the military budget significantly; it totaled only $13 billion. Based on its most-dangerous scenario, the Air Force relied heavily on the ability to mobilize aircraft after the initiation of hostilities. For this reason, the Air Force requested a 70-group program consisting of 6,869 aircraft in active duty and an additional 5,572 aircraft in the Guard and Reserves.[52] The Finletter Commission, convened by the President, and the Brewster Board both concurred with this request, recommending the 70-group program.[53] Given the domestic economic conditions, the Budget Bureau refused the Air Force requests and funded only 55-groups. The Air Force was struck with uncertainty, urgency, and a threat to basic values. There was a level of uncertainty that the funding the Air Force received

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50 Barlow, *Revolt of the Admirals*, 84.
51 Futrell, *Ideas, Concepts, Doctrine*, 216.
52 Futrell, *Ideas, Concepts, Doctrine*, 217.
53 Bernard C. Nalty, ed., *Winged Shield, Winged Sword: A History of the United States Air Force Volume 1* (Washington, D.C.: Air Force History and Museums Program, 1997), 414.

precluded buying the number of aircraft necessary to execute its war plans. There was urgency to modernize and acquire bombers capable of flying longer distances at higher altitudes with larger payloads. The reduced funding was perceived to threaten the Air Force's ability to carry out air operations against the Soviets' vital industrial centers. The Air Force responded, attempting to secure its capabilities. Subsequent years of budget restrictions fostered a long-term crisis within the Air Force.

When the Navy began work on its new 'supercarrier,' another crisis was triggered, instigating uncertainty, urgency, and a threat to basic values. During the period between 1946-1949 the Air Force and Navy were each attempting to secure a new weapon system. This resulted in what is commonly referred to as the *Revolt of the Admirals*. The trigger here lay in the new Navy supercarrier's design to support a nuclear mission. The CVB-X "was intended to be a single-purpose, special-type carrier, designed solely for conducting atomic strikes with 100,000-pound, long-range attack aircraft."[54] The Navy's intention was not to encroach on the Air Force's target sets within the Soviet Union, but to have the capability to target Soviet satellite states and peripheral targets.[55] This trigger combined with the budget crisis to push the Air Force toward an implemental mindset.

Technological Advancement

If declining budgets and Navy supercarriers were not enough, in late 1949 the Soviet Union successfully detonated its own atomic bomb. The Air Force had devised an aircraft-procurement schedule based on the assessment of when the Soviets would acquire atomic weapons—early 1953.[56] The early arrival of Soviet atomic capability again sparked uncertainty, urgency, and threat to the Air Force's basic values. The Air Force had held the atomic monopoly for nearly five years, augmenting the United State's insufficient manpower. "As late as 1949 the United States could have assembled fewer than 200 atomic bombs."[57] It wasn't until 1948 the Air Force had a single team capable of assembling a droppable bomb. The Air Force had 9 atomic bombs at its disposal in

[54] Barlow, *Revolt of the Admirals*, 137.
[55] Barlow, *Revolt of the Admirals*, 137.
[56] Futrell, *Ideas, Concepts, Doctrine*, 229.
[57] Millet and Maslowski, *For the Common Defense*, 477.

1946 and it wasn't until 1950 that the stockpile had significantly increased to 300.[58] Ominously, intelligence assessments determined the "year of maximum danger would be 1954, when the Soviet Union could posses an arsenal of 200 atomic bombs." [59]

Summary

These triggers resulted in a sense of urgency, uncertainty, and threat to the Air Force's basic values. From the end of WWII to Korea, the establishment of the Air Force's most-dangerous scenario required it to assume certain responsibilities, among them deterrence of general war. As historian Bernard Nalty points out, "Deterrence, however, was but a single aspect of an evolving national policy, and the Air Force had to devote its resources to the others: the containment of communism, for example by going to the aid of West Berlin; and regional collective security, best exemplified by NATO."[60] These policies were viewed as peripheral to the main focus of planning and preparing for countering Soviet aggression by bombing their war-making capability. Under the influence of this most-dangerous scenario, the Air Force encountered triggers that sparked crises and an implemental mindset bent on strategic bombing. The Air Force turned inward and rejected opposing opinions and reports. Ultimately, this behavior affected the Air Force disposition toward the CAS mission and its partner in it, the United States Army.

Inter-service Relations

This section examines some of the Air Force's responses to crises and the impact they had on inter-service cooperation in CAS. The analysis will focus specifically on how decisions regarding the Air Force's organization, training, and aircraft procurement affected the CAS mission. Lina Svedin's criteria for detecting cooperation or conflict are the backbone to the investigation. Cooperation is evident when an organization yields or cedes to another, signs or makes and agreement, makes a request of or appeal to the other

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[58] Nalty, *Winged Shield, Winged Sword, Vol 1,* 425.
[59] Sheehan, *A Fiery Peace in a Cold War*, 105.
[60] Bernard C. Nalty, ed., *Winged Shield, Winged Sword: A History of the United States Air Force Volume 1* (Washington, D.C.: Air Force History and Museums Program, 1997), 399-400.

organization, consults with the other on decisions, expands formal relationships or norms, or expresses approval publically.[61] Competition and conflict are manifested through making demands of another organization, verbally criticizing or denouncing decisions, rejecting regulations or norms, issuing coercive warnings or statements in a decision process, or using force to oppress another organization.[62] This section anticipates that, girdled to its most-dangerous scenario, the Air Force set out on a path to diverge from joint-mission areas, adversely affecting cooperation with the Army. From the conclusion of WWII to the opening months of the Korean War, decisions were made forcing the Air Force to relearn how to execute CAS and recover the trust and confidence of the ground forces.

The news of the Soviet atomic capability in 1949 reinforced the Air Forces' perception of the most-dangerous scenario and solidified its role as the guarantor of liberty in a hostile, nuclear world. Giving the Soviet Union any time to deploy its atomic weapons was viewed as catastrophic for the nation, and failure for the Air Force to defend the United States by targeting the Soviet Union and its war-making machine rapidly was unacceptable. Under this conception, the ability to respond to Soviet aggression with strategic air warfare lent credence to the Air Force's most-dangerous scenario and its role. Therefore, it was incumbent upon the Air Force to organize, train, and equip for this most-dangerous scenario.

Organization

The Army Air Forces were quick to reorganize at the completion of WWII, ensuring the right force structure for the perceived most-dangerous scenario. Prior to the intelligence reports of the Soviets acquiring heavy strategic bombing capability, the Air Force assumed the United States would have a 12-month warning before a Soviet attack--allowing mobilization.[63] Budget constraints reduced the original proposal of a 105-group program to a 78-group program. In August 1945, again due to budget constraints, this request was reduced to a 70-group program, with just over 6,800 first line aircraft

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[61] Lina M. Svedin, *Organizational Cooperation in Crises* (Burlington, Vermont: Ashgate Publishing Company, 2009), 28-29.
[62] Svedin, *Organizational Cooperation in Crises*, 29-30.
[63] Futrell, *Ideas, Concepts, Doctrine, 204*.

operational by early 1950. The final approval by Congress was for 55-groups by December 1946. Under this revised program, General Dwight D. Eisenhower, Chief of Staff of the Army and General Spaatz, commanding general of Army Air Forces, agreed to stand up the post-war major commands of the Army Air Forces. There were already rumblings from the Army Air Forces about pursuing independence. With this in mind, the major commands were designated – Strategic Air Command (SAC), Tactical Air Command (TAC), and Air Defense Command (ADC) – and would remain in place after the Air Force gained its independence in 1947.[64] From the onset of organizing the air forces, the Army Air Force took steps to foster cooperation with the ground forces. The physical creation of a tactical command was an example of making an agreement and expanding a formal relationship. In an effort to solidify alliances with the Army ground forces, senior leaders made verbal obligations to one another. General Spaatz stated, "The Air Force would always honor and always meet its commitments to the Army and provide strong tactical air forces."[65] The act of moving TAC operations and headquarters to Langley, Virginia to be close to Headquarters Army Ground Forces in May 1946 was an example of providing a means to open avenues to consult with one another on tactical air operations. It is evident, based on Svedin's criteria, that the Army Air Forces demonstrated cooperative behavior to ensure coordination on tactical air operations, to include CAS. The strength of this cooperative behavior was tested when the Army Air Forces were faced with crises.

The incidents occurring in the fall of 1946, when the Soviet Union revealed its B-29s and the Yugoslavians shot down the C-47s, presented the Air Force with its first crisis. The Soviets were not anticipated to have long-range-bomber capability for several years. The TU-4s indicated Soviet capabilities were more advanced than expected and elevated the threat of the most-dangerous scenario. The production of heavy bombers reinforced the belief the Soviets had aggressive intentions to target the United States and

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[64] Bernard C. Nalty, ed., *Winged Shield, Winged Sword: A History of the United States Air Force Volume 1* (Washington, D.C.: Air Force History and Museums Program, 1997), 401.

[65] Caroline F. Ziemke, "In the Shadow of the Giant: USAF Tactical Air Command in the Era of Strategic Bombing, 1945-1955" (Dissertation, Ohio State University, 1989)., 28.

allied countries. This posed a risk to the Air Force's role in executing its mission. Shortly following this event, the downed-aircraft incident exposed a major deficiency in the Air Force's strategic-bombing-force numbers. Although General Eisenhower had directed the Army Air Force strength levels be kept at a minimum, the Air Force was thrust into an *implemental* mindset and became adamant about the need to increase the current 55-group program to 70 groups. General Spaatz stated, "The surest defense will be our ability to strike back quickly with a counteroffensive, to neutralize the hostile attack at its source, or to discourage its continuance by striking at the vitals of the aggressor."[66] With limitations on the number of groups, General Spaatz "gave first priority to the backbone of our Air Force – the long-range bomber groups and their protective long-range fighter groups organized in our Strategic Air Forces."[67] Secretary of the Air Force W. Stuart Symington in a budget appeal to Congress stated, "Not even the entire $3 billion could give the nation the kind of Air Force that it needed."[68] He went on to say, "Any rearmament effort that did not begin with a 70-group Air Force could not be adopted."[69] Without approval to grow the fleet to the desired size, the Air Force decided to rearrange assets, shifting aircraft away from TAC.

Although the first aircraft reassigned were troop carriers, this was an indication to the Army ground forces of a trend in siphoning off the TAC resources. The Army held the norm that TAC represented the Air Force's commitment to ground support. In electing to pull TAC assets from the organization, the Air Force was indirectly rejecting this norm, creating a conflict between the Services. This was just a prelude to the decisions the Air Force would make during the tight fiscal years.

While still attempting to organize following the crisis of increased Soviet capability, the Air Force was battling a reduction in funding. The 1948 budget further reduced the Air Force to a 48-group program, slicing into the perceived strength necessary to combat the most-dangerous threat. In response to what appeared to be critical force levels, the Air Force decided to consolidate several missions under one command. On December 1, 1948, Continental Air Defense Command (CONAC) was

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[66] Futrell, *Ideas, Concepts, Doctrine*, 214.
[67] Futrell, *Ideas, Concepts, Doctrine*, 215.
[68] Nalty, *Winged Shield, Winged Sword, Vol 1,* 415.
[69] Nalty, *Winged Shield, Winged Sword, Vol 1,* 415.

stood up, with TAC and ADC placed under the command structure, serving as a coordinating agency for tactical aviation, air defense, and the training of Air National Guard and Air Force Reserves. Lt. General George E. Stratemeyer acknowledged after taking command, "the Air Force could not afford separate organizations, fully manned and equipped, to fly tactical support missions for the Army, fly air defense missions, and train the reserve components."[70] The aircraft and personnel were thus assigned to all three commands. All the Services were facing similar budget constraints, however, this move signaled to the ground forces how the Air Force valued tactical aviation and close air support, and solidified the FM 100-20 precedence of CAS being the last priority. Shortly after the consolidation, TAC was a shell of an organization, stripped of its units and deemed an operational and planning headquarters under CONAC.[71] The Air Force pleaded for more funding to preserve the vital missions. However, the funding proposal was intended to add six more strategic bomber groups to the force structure. Congress did not provide the full amount requested, allocating enough to increase SAC by only one more group.[72] The actions of the Air Force contradicted the verbal commitments made to provide support to the Army. With a focus on its perceived most-dangerous scenario and the budget crisis during this timeframe, the Air Force strengthened the missions and roles that reinforced its sense of independence as a global nuclear-strike force. In the event, the relationship between the Air Force and the Army began to deteriorate.

The Army became vocally dissatisfied with the Air Force's de-emphasis on TAC and insisted on a revision of the FM-31-35 "Air Ground Operations" in an attempt to expand its own aviation capabilities. This signaled a peak in the conflict between the Air Force and Army. The Air Force had been designated in the 1948 Key West Agreement to, "furnish close combat and logistical air support to the Army."[73] The Navy joined in with the Army's contention, verbally berating the Air Force for being "unbalanced in

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[70] Nalty, *Winged Shield, Winged Sword Vol 1*, 404.
[71] Conrad C. Crane, *American Airpower Strategy in Korea 1950-1953*, Modern War Studies (Lawrence, Kansas: University Press of Kansas, 2000), 21.
[72] Conrad C. Crane, *American Airpower Strategy in Korea 1950-1953*, Modern War Studies (Lawrence, Kansas: University Press of Kansas, 2000), 21.
[73] James Forrestal, *Functions of the Armed Forces of the Joint Chiefs of Staff*, Memorandum from Secretary of Defense, J.C.S 1478 Series (Washington, D.C.: Joint Chiefs of Staff, April 21, 1948), 11.

favor of strategic bombing to the detriment of its ability to provide tactical air support for ground forces."[74] Naval leadership insisted it was possible to reduce some of the strategic bomber groups to bolster tactical aviation and still remain within the 48-group program. Preoccupied with its most-dangerous scenario and feeling its basic values were being threatened, the Air Force became further rooted in the implemental mindset, rejecting the Navy's recommendation. The Air Force sought, however, to mend its alliance with the Army and reverse the effect its decisions were having on the relationship. The Air Force convened a Board of Review for Tactical Air Operations. Selecting Air Force officers for the Board who had good relationships with the Army symbolized an attempt to reignite a cooperative relationship. The attempt was also made to respond to the Army's request for a dedicated CAS platform. The establishment of the Board was met with anticipation, promising a glimpse of the Air Force owning CAS and supporting the ground forces. The Air Force attributed the successful establishment of the Board as the reason for the Army's convincing counter to the Navy's negative assertions about the state of the tactical air force during the Congressional hearings. The cooperation between the Army and Air Force did not arise solely from the Air Force coordinating a study. Consistent with the theoretical framework, the most-dangerous scenarios impacted cooperation.

The Air Force and Army's most-dangerous scenarios overlapped enough for the Navy-triggered crises to drive the two Services to cooperate. It was agreed among the Services that the initial actions against the Soviets would be an atomic attack. General Vandenberg conveyed the idea that, if war came, the impact of the bombing offensive with atomic weapons would ensure that no surface forces ever had to be engaged.[75] This offered the Army support of its most-dangerous scenario, preventing the ground forces from coming in contact with the Red Army. The overlap in scenarios allowed each Service to secure its counter to its most-dangerous scenario, breeding cooperation. The Army was willing to offer positive verbal approval of the Air Force's decisions because it reinforced the Army's scenario and role.

Unaware of the factors at play in the Army's cooperation and true needs, the Air

[74] Futrell, *Ideas, Concepts, Doctrine,* 251.
[75] Futrell, *Ideas, Concepts, Doctrine,* 255.

Force took a bird's eye view of tactical forces. Throughout the study the Board focused its attention on all the elements of tactical air power: air superiority, interdiction, close air support, and transport. In doing so the Board's report denied the Army's concerns about the Air Force lacking dedicated tactical aviation assets, since it had aircraft capable of performing all the tactical missions. The Army was particularly concerned about not having specific aircraft for close air support and the need for a specialized platform. The conclusions of the Board, advocating for centralization of aircraft and multi-role platforms to be effective in the most-dangerous scenario, created conflict between the Army and the Air Force. The Air Force was negatively communicating by continuing to express disapproval of the Army's requests and rejecting its concerns, stirring up conflict.

The Air Force faced several crises that it perceived affected its most-dangerous scenario and roles. In response to Soviet Tu-4 heavy bombers, budget constraints, and Army and Navy mission creep, the Air Force made organizational changes. The Air Force was focused on achieving a specific number of groups, equating to a set number of aircraft. Prioritization of strategic bombers and the entrenched belief in the most-dangerous scenario and role led to demoting TAC to an administrative function and denouncing the Army's concerns over needed support. Holding fast to the notion the conflict would be rapid and decisive, with minimum exposure to combat exposure of ground forces, the Air Force tipped the scales in favor of strategic bombing. This maneuver was a visible symbol to the Army of the indirect dedication the Air Force would offer ground forces.

Training

From 1945-1950, joint training was organized and conducted primarily between TAC and Army Ground Forces (AGF). With the movement of TAC to Virginia in 1946, doors were opened for training opportunities and cooperation between the Air Force and Army. General Elwood "Pete" Quesada, who was commander of IX TAC at the time, dedicated his forces to demonstrating the Air Force's sincere support of ground forces. He organized aerial demonstrations and set up the Air Indoctrination Course for the

Army ground schools controlled by Headquarters Army Ground Forces (AGF).[76] The training was intended to expose the ground forces to the Tactical Air Control System and air doctrine, especially regarding the CAS mission. Following the Air Force's independence, the training missions continued, fostering cooperative behavior through expanded contact between the Services. Throughout 1948, several joint exercises were conducted, including maneuvers and CAS operations. The largest exercise, Combine III, included Army, Air Force, and Naval air-ground operations. The Air Force and Army had developed a seemingly cooperative relationship through agreeing on doctrine, honoring requests, and intensifying their contact.

Once TAC was rolled under the CADC at the end of 1948 in response to the Air Force's perceived crises, however, interaction between Services became limited, and pilots who were just pulled together conducted joint exercises with their Army brethren. Pilots would participate in the exercises, but on return to their home units, they would return to their normal duties, somewhat disconnected from the inter-service relationship built during the exercise. Historian Bernard Nalty captured, "the same units rarely worked together in successive maneuvers, disrupting continuity and limiting their ability to develop a teamwork characteristic with the Army."[77] Author John Schlight contends, this reorganization stripped TAC of its "institutional memory, the opportunity to train its own people, and the ability to improve its close air support procedures through the lessons learned in joint exercises."[78]

Training is one of the primary ways to solidify cooperation because it requires the Services to yield in certain circumstances, make agreements, express approval of actions, and consult with each other. Training can be formal or informal and yearly or daily, depending on the connections, geography, and missions of the different units. These conditions improve or degrade training opportunities and therefore cooperation. In retrospect, removing TAC from a major-command status and subordinating its resources to other missions severed the lines of interaction between the Army and Air Force. The cooperative opportunity that inhered in the geographic proximity of TAC headquarters

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[76] John Schlight, *Help From Above: Air Force Close Air Support of the Army 1946-1973* (Washington, D.C.: Air Force History and Museums Program, 2003), 65.
[77] Nalty, *Winged Shield, Winged Sword, Vol 1,* 404.
[78] Schlight, *Help From Above,* 86.

and Army TRADOC in Southern Virginia was thus for the moment squandered.

Aircraft

The Army Air Force was already taking steps prior to the end of WWII to determine the future of tactical air power. The lessons emerging from the war sparked requests from the Army for a CAS-dedicated platform. In 1944, the Army Air Force Board was established to run the "Tactical Air Force Development Program" and investigate desirable aircraft designs to support the ground forces. Two years later the Board reported, "Evidence must be produced to show that the present high speed, experimental aircraft can accomplish the ground cooperation mission, otherwise the question of a specially designed airplane for cooperation with the ground forces in Phase III [close air support] operations will have to be considered. This is undesirable…"[79] The Board went on to say, "any airplane designed for Phase III missions would be of limited use for Phase I [air superiority] and Phase II [interdiction], which are of primary importance."[80] The initial efforts to study aircraft specific to supporting ground forces demonstrated cooperative behavior by acting on the Army's request. However, the statements made in the report eroded the cooperation by ultimately rejecting any action on the Army's request. This was repeated again in 1948 with the Board of Review of Tactical Air Power mentioned above.

As discussed in the organization section, the Soviet long-range-bomber capability, budget restrictions, and the Navy's attempt to secure a nuclear mission drove the Air Force to reinforce the critical nature of its most-dangerous scenario and its need to have resources to counter the opponent. The cuts in the budget specifically affected the research-and-development arm of the Air Force, and the air-to-ground platforms were the assets that suffered most. "The Air Force's chief of research and development, Maj. Gen Curtis E. LeMay, informed the Army, it was found necessary to eliminate many projects…intended primarily for ground forces use."[81] The Air Force was focused on

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[79] John Schlight, *Help From Above: Air Force Close Air Support of the Army 1946-1973* (Washington, D.C.: Air Force History and Museums Program, 2003), 57.
[80] Schlight, *Help From Above*, 57.
[81] John Schlight, *Help From Above: Air Force Close Air Support of the Army 1946-1973* (Washington, D.C.: Air Force History and Museums Program, 2003), 74.

securing its strategic-bomber capabilities. The Air Force view held, "the potency of atomic weapons was such that any future war, regardless of how it started, would quickly escalate into global conflict aimed at the enemy's economy and heartland rather than at his armies, and would end quickly."[82] Counting on the U.S. monopoly in atomic weapons, many believed the potential for conflict was well into the future as late as 1950-1954. The Air Force pursued building its strategic force immediately in preparation. Between December 1946 and January 1949, the number of bombers grew from 23 to 121 (8 B-29s, 96 B-50s, and 17 B-36s)."[83]

Following the appearance of the Soviet TU-4s, there was urgency to allocate more resources to the strategic platforms, even though the Soviets did not possess the numbers or payloads to inflict damage to the United States. Under the implemental mindset, adopting tunnel vision and being vulnerable to cognitive dissonance, the Air Force purchased 96 B-45 Tornados to replace the A-26 ground-attack platform. The Tornado was considered a light bomber, one of the first to employ jet propulsion (four engines), and was designed to drop atomic bombs and refuel in midair. The Air Force also had heavy bombers, B-29s and B-50s in the inventory and was awaiting the arrival of new B-36 and B-52 bombers in development. These offered the Air Force intercontinental range, sustaining its role in executing the most-dangerous scenario. The decision to replace attack aircraft did not negatively impact the Air Force and Army's relationship because TAC was still in equal standing with SAC, and the same number of tactical groups existed. The Army, viewing the decision through the lens of response to its own most-dangerous scenario, depended on the Air Force's ability to strike targets deep within enemy territory. The longer-range intercontinental bombers bought the Army more time for mobilization of the reserve force. As long as the Air Force retained TAC's capability, the Army did not interpret the removal of one attack aircraft as a signal of the Air Force disregarding CAS. When the Air Force did begin cutting entire units and demoting TAC to a subordinate role, the relationship became contentious.

The Air Force elected not to spread the budget cuts evenly, but instead replaced and reorganized non-strategic assets. Operating in the implemental mindset, the Air

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[82] Schlight, *Help From Above*, 84.
[83] Nalty, *Winged Shield, Winged Sword, Vol 1*, 425.

Force argued, "The monetary limitations of the budget reveal unmistakably that the weapons and resources of the USAF will not be quantitatively adequate to support both [an Air Defense and Tactical Air Command]."[84] The Army Field Forces conducted a study based on the Air Force's own predictions of its posture under budget constraints. The study concluded, if funds were not increased, the Air Force would choose to cut all tactical aviation groups and associated aircraft. The threat of surrendering all TAC aviation assets generated a letter of concern from the commander of AGF, General Jacob L. Devers. He wrote, "I do not know what plans you may have to keep alive the complex machinery of close support and to allow this specialized activity to progress."[85] The Army petitioned to secure organic aviation assets. Focused on its most-dangerous scenario and engulfed in an implemental mindset, the Air Force was suffering from overconfidence in its view of future combat.

The Air Force perceived the next war would begin and end so rapidly that ground forces would not engage one another. The lens of the most-dangerous scenario focused strategic warfare where, by gaining air superiority and keeping enemy forces from arriving on the battlefield through interdiction, CAS in a major surface campaign would be unlikely. Leaders repeatedly claimed, "Close air support actions will be of limited significance" because it was only if an interdiction campaign had failed that CAS would be required.[86] The Army was not willing to take this chance and began attempting to acquire its own support platforms.

In late 1948, the Army had made a request to the Air Force for the transfer of liaison aircraft to the senior Service. The Army had been participating in several air-ground exercises and felt the liaison squadrons would perform better assigned to the supported Service. The Air Force was already operating under several perceived crises. Improving Soviet capabilities and the Navy's attempt to siphon part of the strategic nuclear mission targeted the Air Force's basic values relative to the most-dangerous scenario. In the implemental mindset, the Air Force perceived the Army's request as a mission grab. TAC viewed this as "the camel's nose under the tent" and if they

[84] Schlight, *Help From Above,* 86.
[85] Schlight, *Help From Above,* 87.
[86] Schlight, *Help From Above,* 91.

succeeded "it was conceivable that reconnaissance, fighter, and bomber aircraft would follow."[87] The request did not directly affect the Air Force's most-dangerous scenario or immediately affect its role in executing its counter, however, as the theory predicts, the effect of the perceived crises turned the Air Force to focus inward with the interpretation of benign actions as relatively hostile. When the request did come from the Army, the Air Force was already resistant to outside attempts to threaten its purpose and basic values. The groundwork was laid for a conflict between the Services.

At the same time the Naval supercarrier-versus-B-36 Congressional Hearings began to kick off. Organizations outside the Air Force offering opposing viewpoints on the efficacy of the intercontinental bombers or on strategic atomic bombardment were ignored. The effect of the crises began to accumulate, reinforcing an implemental mindset and pushing the Service to cling to its most-dangerous scenarios and roles. The Heavy Bombardment Committee had presented findings as early as the fall of 1947 with "concern the B-36 might not have a good chance to penetrate as would faster medium bombers."[88] During Congressional hearings, director of the Marine Corps aviation, Brigadier General Vernon E. Magee stated, "The evidence appears conclusive that in both the Atlantic and the Pacific battle areas, tactical aviation, not strategic bombing was the decisive factor."[89] The Weapons Systems Evaluation Group (WSEG) report anticipated a 30-50% loss rate of the bomber force from lack of intelligence on Soviet defenses and insufficient training on evasive maneuvers. The WSEG report recommended the sole use of atomic weapons to maximize impact for the bombers that did get through. The discouraging prognosis on the effectiveness of bombers did not dissuade the pursuit of strategic atomic bombardment. The Air Force and Secretary Johnson viewed this report as a vindication for the B-36.[90] The survival of the B-36 was crucial for the Air Force in executing its role in its most-dangerous scenario. One way to preserve it was to improve fighter-escort capability through jet technology.

As mentioned previously, the Air Force convened a Board on Tactical Air Power to secure Army support. The Army accepted cooperation, seeing this as an opportunity to

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87 Schlight, *Help From Above*, 82.
88 Futrell, *Ideas, Concepts, Doctrine*, 232.
89 Futrell, *Ideas, Concepts, Doctrine*, 232.
90 Nalty, *Winged Shield, Winged Sword, Vol 1,* 420.

have more influence in the decisions affecting a CAS aircraft should the Air Force procure one. Secretary of the Army Gordon Gray stated during the hearing, "Present development trends in types of aircraft designed to support ground forces may require some modifications."[91] The Air Force was in the process of capitalizing on jet aircraft and was under the impression this was the modification the Army desired. The F-84, F-47, and F-51s were some of the aircraft offered to support ground forces. The Air Force was measuring the performance and suitability of these platforms on the full spectrum of tactical operation, from air-superiority to CAS. The Army was examining their suitability based on CAS. Returning to the most-dangerous scenario, the Air Force reminded the Army of the priority of tactical missions. This created conflict between the Services, as each side refused to yield. Discontent with the actual aircraft available to support CAS missions, the Army petitioned for its own procurement and development capability. Cooperation did occur when it was determined the Air Force could retain its role in its most-dangerous mission without threat. In May 1949, the Air Force and Army came to an agreement by putting limitations on the type and weight of aircraft the Army could acquire.

When the crises challenged the Air Force's ability to execute its role in the perceived most-dangerous scenario, the Service became adamant in maintaining its aircraft. Conflict arose from the Air Force's inability to yield or concede to requests from the Army to provide a dedicated platform for CAS and tactical aviation assets directly supportive of the Army's mission. This conflict was so strong that the Army attempted to acquire its own air assets, demonstrating a lack of trust and confidence in the Air Force to support the missions it was committed to. Cooperation occurred when the Air Force made agreements to include the Army and respect its requests. Unfortunately the promises were fleeting because the Air Force and Army were viewing CAS aircraft through different lenses. When it came time to retain, procure, or supply the platforms, the Air Force did not respond to the Army's needs.

Summary

The global, national, and strategic events that transpired from the end of WWII to

[91] Schlight, *Help From Above,* 97.

Korea had an impact on the CAS mission and the relationship between the Air Force and the Army. For the first time since the founding of the United States, foreign policy was codified (NSC-68) and a specific enemy was named (Soviet Union). The nation's military institutions were charged to deter the Soviet threat while containing the spread of communism, both at home and against allies. The Services acknowledged this responsibility by organizing, training, and equipping around the perceived most-dangerous scenario. "By mid-1950, the Air Force, assumed certain responsibilities, among them deterrence of nuclear war, that it has carried out ever since, albeit with changes in equipment, emphasis, and funding. Deterrence, however, was but a single aspect of an evolving national policy, and the Air Force had to devote its resources to the others: the containment of communism, for example by going to the aid of West Berlin; and regional collective security, best exemplified by NATO."[92] Over the course of the interwar years leading up to Korea, several events triggered crises, challenging the Air Force's response to its most-dangerous scenario. The Air Force responded to these crises by securing the mission and capabilities it perceived were necessary to be successful, rejecting external arguments in opposition. The result of this was a reduction in tactical air power, mainly close air support, and an erosion of the relationship between the air and ground forces. There were, however, times when the Air Force fostered cooperative behavior. This occurred in verbal statements, and positive contact between Services. Unfortunately, conflict and competition arose by removing the tangible assets aimed to solidify interaction, overshadowing cooperation. At the start of the Korean War the Air Force was not prepared to conduct CAS in the most effective way. Lack of interwar cooperation between the Air Force and Army eroded opportunities to work out command-and-control issues, tactics, and the unique needs of detailed integration. Luckily, the interwar period was short. Even with a lack of dedicated platforms and inter-service trust; it didn't take long for the Air Force to regain CAS proficiencies learned in WWII. General William W. Momyer in *Airpower in Three Wars* states, "Even with these reduced [tactical air] forces and the emphasis on nuclear operations, there

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[92] Bernard C. Nalty, ed., *Winged Shield, Winged Sword: A History of the United States Air Force Volume 1* (Washington, D.C.: Air Force History and Museums Program, 1997), 399-400.

remained a high residuum of experience in non-nuclear operations from WWII."[93] This, however, turned out to be little solace for the grunts with enemy in their wire and aircraft overhead that were neither designed for nor exercised in the ground-support role. Attempts to plan for the Air Force's most-dangerous scenario negatively impacted the cooperation between the Air Force and Army, created, conflicts, and eroded the CAS mission.

The Korean War

Despite the commitment to allies and the containment strategy, the Korean War was not the war the American political and military leaders expected or planned on fighting. The Air Force and Army's Pacific forces had recently been moved from South Korea to Japan, reducing American presence on the peninsula. The Air Forces stationed in the Far East Theater were structured primarily as an aerial defense for Japan.[94] Similar to Europe, most troops in the Far East were occupational forces, protecting several of the islands from potential aggressors. When North Korean communists crossed into Western-backed South Korea on June 25, 1950, the UN Security Council condemned the invasion and called upon UN members to aid the Republic of Korea (ROK). American military forces were sent to respond.

The Air Force's Far East Air Forces (FEAF) spent the first week of the war evacuating American civilians, contending the North Koreans for air superiority, and targeting North Korean ground forces and supplies. The North Korean People's Army (NKPA) relentlessly pushed ROK forces south, which energized President Truman to order the deployment of American ground forces on June 30, 1950.[95] At this same time the FEAF, realizing the ground situation was deteriorating rapidly, requested more aircraft. In response the Air Force sent some additional assets to the fight, the WWII F-51 propeller-driven aircraft and two groups of B-29 strategic bombers. The opening weeks of the Korean War consisted of rapidly changing front lines, as North Korean

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[93] General William W. Momyer, *Airpower in Three Wars: WWII, Korea, Vietnam* (Maxwell Air Force Base, AL: Air University Press, 2004), 3.
[94] Donald W. Boose, Jr., "The Army View of Close Air Support in the Korean War," in *Coalition Air Warfare in the Korean War, 1950-1953*, ed. Jacob Neufeld and George M. Watson, Jr. (Washington, D.C.: Air Force History and Museums Program, 2005), 103.
[95] A. Timothy Warnock, ed., *The USAF in Korea: A Chronology 1950-1953* (Maxwell Air Force Base, AL: Air University Press, 2000), 4.

ground forces drove the Eighth Army and UN forces south. In attempt to halt the North Korean advance, Fifth Air Force, the resident Pacific unit, allocated B-26 light bombers, and F-80 and F-82 jet fighter interceptors to the fight.

The Korean War is typically divided into phases based on the fluctuating character of the war. According to historian Conrad Crane, there were five phases: 1) the initial attack by the NKPA in June 1950, which drove the South Korean and UN forces to the edge of the peninsula inside the Pusan Perimeter; 2) General Douglas MacArthur's landing at Inchon and the breakout of the Pusan Perimeter sending the UN forces on the offensive in September 1950; 3) the entrance and offensive attack of the Chinese forces to support the NKPA in November 1950; 4) the Eighth Army's counterattack and recapture of Seoul in June 1951; and 5) two years of a bloody stalemate at the 38th parallel.[96] Events that transpired in the first year of the war were very reminiscent of various battles and phases from WWII, yet air-to-ground relationships and successes that emerged from previous experiences were missing from the opening weeks and months of the Korean War. That year, from June 1950 through June 1951, the war was extremely mobile and presented numerous occasions where coalition and friendly forces were in direct contact with enemy forces requiring close air support.

UN forces were not well equipped with heavy firepower to fight an intense land battle and attempted to offset the lack of artillery with airpower. Close air support was vital during the fall and winter of 1950, when the NKPA nearly pushed UN forces off the peninsula and when the counteroffensive by the Chinese encircled several units, cutting them off from reinforcements. In the first few months, "sixty-two percent (3,251) of Far East Air Force's (FEAF) 5,232 sorties supported the South Korean and American ground forces."[97] With the dire straits of the UN ground forces, and nearly losing a foothold in country, "Of all the airpower missions, close air support probably proved to be the most crucial throughout the Korean War."[98] Unfortunately, the high number of missions flown did not translate to a high degree of effectiveness. The lack of cooperation between the Air Force and the Army during the interwar years on command-and-control, close-

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[96] Crane, *American Airpower*, 2-3.
[97] Schlight, *Help From Above*, 120.
[98] Earl H. Tilford, Jr., *Setup: What the Air Force Did in Vietnam and Why* (Maxwell Air Force Base, AL: Air University Press, 1991), 18.

support tactics, and detailed integration in CAS degraded joint operations.

The Joint Operation Center (JOC) was opened up in Taejon on July 5, 1950, "to provide improved close air support for U.S. ground forces."[99] This system was codified in the FM 31-35, *Air-Ground Operations*, in 1946 based on lessons learned from battles fought in northern Europe in 1944-1945. The purpose of the JOC was to provide a structure for the tactical air force commander to cooperate with his ground force counterpart in determining air mission priorities.[100] Following the Air Force's split from the Army it was agreed upon that FM 31-35 needed to be revised, however, arguments about the revisions delayed the new document for several years and it was not updated till well into the Korean War. Even with over eight exercises occurring between the Air Force and Army from 1947 through 1950, the coordination and communication system was not resolved. The infamous Barcus and Stearns report captured this in its assessment, "The Tactical Air Control System lacked integrated control and supervision. The communications system within Fifth Air Force was unable to provide the volume of service, and the security for that service, that was required for operational use in the Korean War. The air-to-ground communications system was unsatisfactory and failed to provide the communications needed for effective utilization of aircraft employed in the close attack role. The Tactical Air Control System, although hindered by the absence of an Air-Ground Operation System, was generally less effective than was desirable."[101]

Detailed integration is a key component to effective CAS, and in Korea the Air Force and Army did not have a system in place to foster it. The Army caught a glimpse of the Marine CAS system throughout the war and consistently asked for the Air Force to mirror that system. The request for Marine air support is clear in the fact that, with fewer airplanes available, the Marines flew 50% of all the CAS missions.[102] The deficiencies in Air Force CAS "included insufficient sorties available for CAS, airfields too far away

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[99] Warnock, *The USAF in Korea*, 6.
[100] Allen R. Millet, "Korea 1950-1953," in *Case Studies in the Development of Close Air Support*, ed. Benjamin Franklin Cooling (Washington, D.C.: Office of Air Force History, 1990), 347.
[101] Air War College, *Evaluation of the Effectiveness of the USAF in Korea: Barcus & Stearns Reports*, Analysis of Barcus and Stearns Reports (Maxwell Air Force Base, AL: Air University, July 30, 1951), 4.
[102] Crane, *American Airpower*, 176.

from the front lines, delays caused by overcentralized control from the Joint Operations Center and insufficient control parties, and the failure since WWII to develop special aircraft and armament capable of providing more effective close support to the ground forces."[103]

F-80s, F-86s, F-51s, B-26s and even some B-29s were the only aircraft available to the FEAF and were thrown into the CAS mission even though they were not designed for it. Several of these platforms were not well suited for the mission, but attempted to overcome limitations to affect the battlefield. Witnessing the success of the Marine CAS platforms, Army forces consistently asked for the propeller-driven planes, which were able to operate from rough fields that were closer to the front and better suited for CAS. On July 17, 1950 B-29s engaged in close air support attacked the wrong target, killing 22 civilians.[104] In another instance, 98 B-29s released over 3,000 500-pound bombs and 150 1,000-pound bombs on a 3.5-mile-wide by 7.5-mile-long target area. The battle damage assessment concluded one KIA and no other evidence that enemy forces had been there at all. With minimal means of communication and spotty aircraft performance, the Army placed the bombline about 5-8 miles from the front lines and relied on its artillery to provide direct support within the line.

One way the Air Force adapted to overcome the lack of detailed integration and coordination was to push out the controlling agencies mentioned in the FM 31-35. The Air Force provided two different types of close-control agencies: the ground forward air controller (FAC) of the Tactical Air Control Party (TACP) or an airborne Tactical Air Coordinator (TAC) flying in a light observation aircraft or fighter-bomber. Unfortunately because the FACs positioned with the Army forces had to get within line of sight of the aircraft to communicate, if the radios even worked, they consistently had to expose themselves on the front lines. This risk took the lives of many FACs and destroyed the radio jeeps.[105] Therefore the CAS missions relied very heavily on the TAC or Mosquito pilots to provide control and coordination for hostile targets. "These agencies guided the attacking aircraft onto the target and away from friendly troops through combinations of

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[103] Crane, *American Airpower*, 110.
[104] Schlight, *Help From Above*, 120.
[105] Millet, "Korea 1950-1953.", 364.

voice communication, marking rockets, artillery smoke, shells, and electronic signals."[106] Although this was a solution to the control problem, it did not resolve the coordination problem. The Mosquitos were unable to communicate with the ground forces and therefore they could not deconflict with friendly movements or artillery fire. On September 22, 1950 following the successful breakout from the Pusan Perimeter, a "flight of Mustangs bombed and strafed the 1st Battalion, Argyll and Sutherland Highlanders, British 27th Brigade."[107] The strikes disrupted the friendly forces and the NKPA capitalized, driving the British from the hill. Over seventy soldiers were wounded and killed by mistakes made during the CAS mission.

As the war went on improvements were made to the command and control system, weapons and fuzes, and response time. The issues that arose in wartime were not based on a lack of proficiency; as the pilots who flew in WWII quickly regained their CAS capability and prevented more unnecessary loss of life and resources. Some air force officers claimed, "Many of the operational problems that handicapped the efficiency of air units in Korea came from having a war mission suddenly thrust upon them."[108] This excuse falls flat, especially when the lessons of WWII were codified, but just not executed. The actions taken in the interwar years to drive distance between the Air Force and Army's ability to cooperate in CAS led to disorganized implementation of CAS and avoidable loss of life and treasure.

[106] Millet, "Korea 1950-1953.", 348.
[107] Millet, "Korea 1950-1953.", 369.
[108] Air War College, *Evaluation of the Effectiveness of USAF in Korea*, 15.

Chapter 5

The Eye of the Beholder - A New Look: 1953-1965

The relationship of air power to ground warfare – taking each of these terms somewhat abstractly – is a dialogue between "is" and "ought", between what assets exist and varying notions of what to do with them, and between readings of capabilities and dreams of accomplishment.
- Donald J. Mrozek

Introduction

This chapter attempts to carry out the same mission as the previous chapter, testing the theoretical framework against an interwar period. Under examination are the years between Korea and Vietnam. The United States had been involved in Southeast Asia in various capacities throughout the 1950s and early 1960s, making it difficult to truly pin down the beginning of the Vietnam War. For this paper, the beginning of Vietnam coincides with the deployment of United States active-duty ground forces in 1965. Similar to the previous one, this chapter will begin with a brief survey of the global events that occurred during this timeframe. The most dangerous threat, the Soviet Union's efforts to propagate communist ideology, still existed and continued to mold the political and international landscape. It is not necessary to reestablish how the Soviets were deemed the most-dangerous threat, however, it is important to acknowledge some of global events that transpired during this period. These events impacted the political and military leaders' perceptions of the threat and in turn the national security policy as well as the Services interpretation of their environment. It is from this mosaic of international events and national policy that the Air Force and Army derived the most-dangerous scenarios and necessary responses.

Interestingly, even with the shifting political and international landscape, the Air Force returned to its previous most-dangerous scenario. Given this, it may not be surprising that the Air Force discarded the lessons learned from Korea and the possibility that small and medium powers would attempt to assert influence under the umbrella of a great-power nuclear stalemate. The Army, assessing the unique construct of war among nuclear powers, could once again countenance limited conflicts. Prior to the Korean War

the Air Force and Army had a shared view of what future war would look like: another total war with the United States relying on an atomic monopoly. Soviet acquisition of the atomic bomb in 1949 and the Korean War fractured this popular perspective. The vision of future war became more spectral during the period between Korea and Vietnam. The Air Force maintained the extreme view that all future wars would have to escalate into general war, and the Army developed the perspective that war could occur shy of a nuclear exchange. Viewing war from two very different vantage points began to create a cleavage between the Services' most-dangerous scenarios. By carrying its most-dangerous scenario over from the years prior to Korea, the Air Force was more susceptible to becoming locked into an implemental mindset. There was overconfidence in its intelligence and interpretation of world events, which amplified the likelihood of its most-dangerous scenario. This mindset altered the Air Force's perception of the crises it faced, influencing its responses. Under these conditions the responses facilitated periods of cooperation and conflict between the Air Force and Army.

Prior to Korea the Services' scenarios overlapped, which encouraged interaction and formal agreements. Unfortunately, the degree of cooperation witnessed in the previous case study, although sufficient to prevent outright conflict between the Services, hung on unpracticed agreements and did not set the Services up for effective CAS in the opening stages of the Korean War. After Korea, the Services were challenged to maintain even a cordial cooperative relationship due to the divergence in the most-dangerous scenarios.

Strategic Landscape

The three short years of the Korean War had an impact on senior political and military leaders' perception of the strategic threat. Although counterarguments existed, the United States was convinced the Soviet Union was behind the Korean War. Many Americans were adamant the Soviets were using North Korea as a proxy force, first to initiate the spread of communism worldwide and secondly to drain the United States of its military resources. Overtly operating under the policy of containment, United States analysts assumed the Soviet's newly acquired atomic weapons provoked a level of boldness. The Korean War was seen as an attempt to directly challenge the United

States' resolve to stifle communist expansion after the Soviets had achieved a degree of nuclear equivalency. It also followed on the heels of the Mao Tse-tung's victory, and was assessed to be an attempt for the Soviets to expand the Chinese communist influence throughout Korea. These unique circumstances helped senior leaders view the war as a political anomaly and militarily insignificant. These perspectives clouded lessons from the war and reinforced an aggressive national policy.

A principal lesson emerged from the Korean War. Nations with atomic weapons now had the strength to engage in conflict, but would demonstrate restraint from using nuclear weapons given their political objectives. Two different interpretations emerged from this insight. One was that the policy of containment and the commitment to various alliances increased the potential for the United States to be involved in more limited conflicts to squash the Soviet's effort to plant communism around the world. The other interpretation perceived the Soviets behind all local and regional conflicts; the United States could and would have to contain the threat by striking at the heart of the USSR. The United States was not interested in fighting limited wars. It was not feasible or affordable to build the military force required to fight a plethora of limited wars and protect the Eurasian landmass, nor were Americans willing to sacrifice their national treasure to do so. Experience from the war enhanced the belief that limited future conflicts would result in bloody wars and could potentially devolve into WWI-style trench warfare, as witnessed in Korea, unless they were ended decisively. The only way to avoid this form of war was threatening the most destructive and decisive use of force available to convince the opponent to avoid conflict or to quit fighting rapidly. The United States was confident that the atomic monopoly the it held for five years following WWII prevented Soviet aggression in Europe, and was encouraged by the conviction that a stronger nuclear deterrent would completely prevent future Soviet aggression, both on a large or small-scale. This, along with the Soviet detonation of a fission device, led to the pursuit of the hydrogen bomb. Both military and political leaders took up the chant, "No More Koreas." The United States military was ill prepared to fight the wars of liberation that comprised so much of the Soviet agenda. Ironically, it might have welcomed another Korea in lieu of what it was to face in Vietnam.

Almost coincident with the Korean conflict, and in the short span of three years, two nations acquired some of the most devastating weaponry ever seen on Earth. The United States detonated the first hydrogen bomb in November 1952 and the Soviet Union was quick to follow in August 1953.[1] These weapons significantly impacted the international environment. The powerful and often demonstrated effects displayed the potential to destroy entire nations, not just villages. The new weapons satisfied the desire to strike decisively at the enemy and achieve overwhelming results. Many believed a Korea would never happen again because the Soviets would not be so bold as to risk total nuclear annihilation. Building thermonuclear bombs and having the capacity to deliver these weapons gave the United States a premier deterrent against the Soviets. One caveat in the 1950s was that the United States still required overseas bases for deploying the bombers. This need, combined with a desire from others nations around the world to fall under the protection of the thermonuclear umbrella, drove the United States to become even more diligent in containing the Red Menace and to solidify its ring of alliances around the Soviet Union.

In, *For the Common Defense*, Allan Millet and Peter Maslowski provide a summary of the effect the events of 1950-1953 had on the United States' approach to military policy. The authors state, "It provided a political context for rearmament and the development of NATO. It also drew the United States into a more active military role in Asia, which now joined Europe as part of the Free World system of collective, forward defense."[2] There was also increased support for the French war in Indochina. Supporting other nations allowed the United States to hold fast to the belief it was the West's responsibility to prevent the spread of communism and Soviet imperialism. Each president from the Korean War to Vietnam was intent on seeing this struggle through over the long-term. The seemingly monolithic communist threat was no longer regarded as a crisis, but instead the competition had settled into a Cold War. The Korean War did not alter national policy, and the arrival of the thermonuclear weapons allowed nuclear diplomacy to remain at the core of the United States' national security policy.

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[1] John Lewis Gaddis, *The Cold War: A New History* (New York, New York: Penguin Group, 2005), 62.
[2] Allen R. Millet and Peter Maslowski, *For the Common Defense: A Military History of the United States* (New York, New York: The Free Press, 1984), 503.

In fall of 1953, NSC 162/2 reiterated the Soviet threat. It documented, "The primary threat to the security, free institutions, and fundamental values of the United States is posed by the combination of: a) basic Soviet hostility to the non-communist world, particularly the United States; 2) great Soviet military power, and c) Soviet control of the international communist apparatus and other means of subversion or division of the free world."[3] When NSC-20/4 was published in 1948, senior leaders predicted 1955 would be the year of "maximum danger" where the Soviet Union would possess "a stockpile of atomic weapons sufficient to mount a devastating attack on United States military installations, industry, and population centers."[4] The year was rapidly approaching, and the diversion of the Korean War had depleted resources necessary to counter Soviet aggression.

Powerful fusion weapons provided President Eisenhower the means necessary to develop the "New Look" strategy. The goal was to preserve domestic spending, balance a strong military capability, and avoid the cost in blood and treasure of becoming involved in another Korea. Eisenhower, acknowledging the nation's commitment to NATO and other allies, proposed a "twofold requirement – preparedness for the essential initial tasks in case a general war should be forced upon us, and maintenance of the capability to cope with lesser hostile actions – and aimed to satisfy this requirement with less drain on our manpower and financial resources."[5] Eisenhower elected to establish financial stability domestically by shifting away from NSC-68 and the build-up that resulted from the Korean War. "Truman's rearmament policy rested upon the assumption that if deterrence failed, a war with the Soviet Union would be a protracted struggle in which nuclear weapons would open, but not close, the war."[6] The spending required to conduct this war was unacceptable, and Eisenhower had to find a different way. The threat to use nuclear weapons was the key to offsetting the cost of manpower with firepower. He articulated this belief to a reporter stating, "in any combat when these

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[3] James S. Lay, Jr., *Basic National Security Policy: NSC-162/2* (Washington, D.C.: National Security Council, October 1953), 1.
[4] Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force 1907-1960* (Maxwell Air Force Base, AL: Air University Press, 1989), 419.
[5] Futrell, *Ideas, Concepts, Doctrine*, 425.
[6] Allen R. Millet and Peter Maslowski, *For the Common Defense: A Military History of the United States* (New York, New York: The Free Press, 1984), 493.

things [nuclear weapons] can be used on strictly military targets and for strictly military purposes, I can see no reason why they shouldn't be used just exactly how you would use a bullet or anything else."[7] With this mentality, there was little hesitation to make the hydrogen bomb the mainstay of national policy. Not too surprisingly, the New Look policy took America's conviction in nuclear diplomacy to new heights.

Eisenhower was a career military man, and the realization that the United States did not have sufficient conventional forces to halt a Soviet attack led him to rethink the balance of the military. Senior military leaders were also well aware of this conundrum. General J. Lawton commented, "To prevent an invasion of western Europe, the area most coveted by the Communists, we would have to fight an altogether different war than we have been fighting."[8] President Eisenhower and his administration "deemphasized conventional forces and stressed the deterrent and war-fighting potential of nuclear weapons."[9] Examining the Soviet's capabilities, the escalation to nuclear war appeared likely. "The capability of the USSR to attack the United States with atomic weapons has been continuously growing and will be materially enhanced by hydrogen weapons."[10] It was critical for the United States to present a credible policy congruent with the domestic and international conditions to combat the Soviet threat.

The "New Look" strategy also coined "Massive Retaliation." The latter was predicated on the idea that thermonuclear weapons could deter the Soviet Union from engaging in both limited and total wars. This led decision-makers to believe "the strategic nuclear deterrent would keep the USSR from initiating a limited war for fear that it may grow into a general war it could not win."[11] The implications in this all-or-nothing approach were significant for both the Air Force and Army. "Massive Retaliation in many ways represented the Air Force's long campaign for recognition of its supremacy among the military services…promising a rosy future for its budget and

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[7] Gaddis, *The Cold War*, 64.
[8] Futrell, *Ideas, Concepts, Doctrine*, 419.
[9] Millet and Maslowski, *For the Common Defense*, 512.
[10] Lay, Jr., *NSC-162/2,* 2.
[11] John Schlight, *Help From Above: Air Force Close Air Support of the Army 1946-1973* (Washington, D.C.: Air Force History and Museums Program, 2003), 182.

prestige."[12] General Thomas D. White, Air Force Vice Chief of Staff stated, "Our Air Force with its ability to deliver nuclear weapons had been recognized as an instrument of national policy."[13] For the Army the future looked even bleaker than the post-WWII era of reductions and nuclear dominance. Although nuclear brinkmanship was the established policy, many people were just starting to come to terms with the consequences of this life-threatening approach.

Debate within the Department of Defense and among top policy officials contemplated the possibility that any political quarrels would result in all-out general war. Some insisted there must be an escalation period of forceful blows before a nuclear exchange. Others insisted the nuclear attacks would come and be intense and severe for the first 30 days, but then for up to three years major military operations would continue with a reduced level of nuclear attacks.[14] As national discourse rose and minor conflicts appeared around the globe, clamor regarding the conditions necessary for the administration to follow through on executing a nuclear strike increased. In 1956, Admiral Radford, Chief of the Navy, sought to define "general war" in order to clarify when the United States would conduct a nuclear attack. In a vote of three to two among the Service Chiefs, general war was defined as "any war in which the armed forces of the USSR and the US are overtly engaged."[15] This vote elevated key contentions several factions within the Pentagon had with the New Look policy. The Army Chief of Staff and Marine Corps Commandant "insisted that a limited conventional and atomic conflict with the Soviet Union remained possible because both sides would be restrained by the risk of mutual annihilation."[16] Although this seems to be an unusual prediction given the Administration and Department of Defense's strong disposition toward general war and Massive Retaliation, it emanated from the Services' assessment of their environments.

The perspectives of military leaders and policy officials varied based on their sphere of influence, roles, and objectives. As a major contributor to the defense of

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[12] Schlight, *Help From Above*, 182
[13] Futrell, *Ideas, Concepts, Doctrine*, 432.
[14] Ingo Trauschweizer, *The Cold War U.S. Army: Building Deterrence for Limited War* (Lawrence, Kansas: University Press of Kansas, 2008), 63.
[15] Trauschweizer, *The Cold War U.S. Army*, 63.
[16] Trauschweizer, *The Cold War U.S. Army*, 63.

Western Europe and with binding promises to NATO, the United States military had a parallel commitment. Not only were the armed forces required to defend the nation from Soviet attack, but the Services also had to provide forces and capabilities to assist NATO operations. The responsibilities for the Services were derived from two possibilities, general war or limited war without nuclear weapons. According to the MC 14/2, *Overall Strategic Concept for the Defense of the North Atlantic Treaty Organization Area*, NATO anticipated three courses of action by the Soviets. The Soviet Union would initiate a massive nuclear offensive kicking off general war; miscalculation of Western intentions would spark general war; or as a result of military operations of a limited nature devoid of nuclear weapons, general war would again occur.[17] Many countries believed Soviet intentions in Europe were designed to acquire domination over the European states and their resources. For this reason, it was anticipated the "war would be fought in several phases."[18] Although the use of atomic weapons was expected, it was unlikely that the Soviets would totally destroy with nuclear weapons the continent they coveted.

The death of Stalin in March 1953 offered a glimmer of hope in the reduction of Soviet aggressive pursuits. Unfortunately, this would not be the case. In the summer of 1953 East German workers protested the new "Constructing Socialism" program and the Soviets responded with military force. The United States sent food and humanitarian aid into East Berlin for two weeks in July to offset the tactics employed by the Soviets. The Korean Armistice had just been signed a month earlier, and many decision-makers interpreted this demonstration of force as a wake-up call that Western Europe was still the focus. The NATO strategy envisioned at Lisbon the year prior required a new assessment. The alliance was convinced it was still unable to supply the manpower required to halt Soviet forces. Therefore, in December 1954, it was agreed that ground forces would utilize atomic weapons to defend the allied lines. General Lauris Norstad explained the role of NATO ground forces; "Our first task must be to create conditions, so if an incident should arise…we could compel a pause. Our second objective is in this

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[17] North Atlantic Military Committee, *A Report by the Military Committee on Overall Strategic Concept for the Defense of the North Atlantic Treaty Organization Area*, NATO Strategy Documents (NATO, May 23, 1957), 8-9, accessed April 9, 2014, http://www.nato.int/docu/stratdoc/eng/a570523a.pdf.
[18] Trauschweizer, *The Cold War U.S. Army*, 37.

break to compel the aggressor to make a conscious decision that he is either going to war or he is not going to war."[19] NATO ground forces would thus be the shield, and NATO air forces would be the sword.

This dichotomy of sword and shield framed the perspectives and thinking of the Air Force and Army. For the Air Force, strategic nuclear attack provided deterrence against attack on the homeland, the Soviet Union conducting general war against NATO, and the ability to offset Soviet conventional capabilities in Europe. The Army, as the shield, would be confronted with absorbing Soviet attacks. In NATO doctrine, based on proximity, it was expected that the ground forces would engage with the Soviets early in the conflict to secure territory and assure the impact of a strategic nuclear counterstroke. "The Allies, in the initial and critical phase, would need to conduct a series of mutually dependent land, sea and air campaigns of maximum intensity. The objectives of these campaigns which include the nuclear strategic campaign would be to defend the populations, territories, vital sea areas and offensive striking power of NATO, and to destroy the ability and the will of the enemy to pursue general war." [20] The two-fold requirement in the New Look policy hints at the sword and shield concepts, both visible in the backdrop of creating policy and strategy.

During an era of extremes, the phrase Massive Retaliation overshadowed conventional elements of NATO defense policy and United States national policy. Fear overpowered logic in many ways, consistently driving the logic to the edge of the nuclear precipice. The NATO military Committee acknowledged, "Nevertheless, a general war, though not the most likely eventuality, remains the greatest threat to the survival of the NATO nations."[21] The numerical superiority faced by the NATO countries and the possibility of Europe being overrun, once again led to the conclusion that the West would need to respond immediately, both tactically and strategically, with nuclear weapons. The Army and Marine Corps attempted to pull the conversation back to center, inserting "flexible response" into the dialogue and addressing the expectations during limited engagements. Whether the Soviets instigated via general or limited war, NATO

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[19] Futrell, *Ideas, Concepts, Doctrine*, 431.
[20] North Atlantic Military Committee, *MC 14/2*, 9.
[21] North Atlantic Military Committee, *MC 14/2*, 7.

documents anticipated they would use "air, sea, and land campaigns to isolate and seize NATO Europe."[22] Statements made by Army Chief of Staff, General Maxwell Taylor, and Marine Commandant, General Randolph Pate, regarding limited war reflect mental alignment with the potential for a more gradual nature of conflict, where intentions were carefully weighed and the possibility for fighting existed without triggering total annihilation. The sword-and-shield concept helped foster diverging views within the Services, placing their Weltanschauung at different points along the spectrum of total conflict. This difference in worldview set the foundation from which the Services interpreted events that transpired following the Korean War.

Across the globe, regional conflicts were kicking off as small to mid-level powers attempted to exert influence and gain superpower support. The French had been involved in fighting communism in Indochina since the end of WWII. In May 1954, French forces were pinned down in Dien Bien Phu and suffered a devastating defeat at the hands of what was perceived to be an inferior foe. The United States had supplied military liaison officers, equipment, and weapons to support the French, but was for the most part observing rather than engaged in the fight. Later that year, in the fall of 1954, Mao Tse-tung demonstrated his strength when he began a military campaign against the Nationalists on the islands of Quemoy and Matsu. The United States' promised support of Chiang Kai-shek required President Eisenhower to respond. This was the first test of the Massive Retaliation policy; and, in character, Eisenhower threatened the use of nuclear weapons if China did not cease shelling the islands. Mao terminated his build-up and aggression.

Under the various alliances and bilateral agreements the United States had engaged, the Quemoy/Matsu incident was just the first of many where the New Look policy would be tested. Tensions had also been escalating in the Middle East from 1955 through early 1956, when the Egyptian President Gamal Abdel Nasser had met with the Soviets and purchased weapons from Czechoslovakia and publically recognized the People's Republic of China.[23] In response, the United States pulled out of a deal to fund the Aswan Damn project. In July 1956, President Nasser nationalized and "seized

[22] North Atlantic Military Committee, *MC 14/2*, 9.
[23] Gaddis, *The Cold War*, 127.

control of the Suez Canal."[24] At the height of the dispute, the Soviet Union threatened to launch nuclear intercontinental ballistic missiles at France and Britain.[25] In October the Israelis attacked and were quick to defeat the Egyptians, but Eisenhower moved naval forces into the area in case the Soviets entered the fight. Although the United States was not involved in an alliance prior to the Suez Crisis, the event led to the creation of the Eisenhower Doctrine. This commitment was to "assist any Middle Eastern state threatened by aggression from any other state controlled by international communism."[26] As the United States was focused on events in the Middle East, East Germans and Hungarians staged a revolt against the Soviet occupation forces. This reinforced NATO's fear of Soviet aggression spilling out of Eastern Europe and escalating because of miscalculations, requiring American intervention.

During 1958, conflict would continue to circle the globe from the Middle East to Asia to Europe. The governments in Iraq and Jordan were facing coups, and in July Lebanon was approaching a civil war. According to the Eisenhower Doctrine and in an attempt to prevent a larger crisis in Lebanon and respond to pleas for assistance, the United States sent 15,000 American troops into Beirut.[27] During that same summer, Mao attempted another attack on Nationalists and the islands of Quemoy and Matsu. Mao's second act of aggression on the islands, made four years after the New Look policy was instituted, offers a glimpse into how tenuous Massive Retaliation had become. The underpinning dogma was that a threat of firepower (atomic weapons) over manpower would suffice in bending the opponent's will. The questions that started to surface were how much firepower, what kind, and against whom? As Chairman of the Joint Chiefs of Staff, General Nathan F. Twining suggested, "we would strike Communist air fields and shore batteries with atomic weapons. All the studies carried out by Defense indicated that this was the only way to do the job."[28] He went on to say, "the use of conventional

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[24] Millet and Maslowski, *For the Common Defense*, 527.
[25] Futrell, *Ideas, Concepts, Doctrine*, 451.
[26] Millet and Maslowski, *For the Common Defense*, 527.
[27] Millet and Maslowski, *For the Common Defense*, 527.
[28] Campbell Craig, *Destroying the Village: Eisenhower and Thermonuclear War* (New York, New York: Columbia University Press, 1998), 83.

weapons would mean our involvement in protracted Korean War-type conflict."[29] Eventually diplomacy prevailed and the use of force, atomic or conventional weapons, was averted.

This sign of relief quickly dissipated in November 1958 when the Soviet Union ordered Britain, France, and the United States to withdraw their troops from West Berlin by the spring of 1959.[30] Refusing to acquiesce to Soviet pressures, the United States attempted to come to a diplomatic agreement. While talks lingered, the Cuban government had fallen into the hands of communist leadership under Fidel Castro. The foundations of Massive Retaliation were really starting to crumble as communism had now spread to the Western Hemisphere. The club of massive retaliation gained a new member with France's testing of its atomic bomb in 1960. This event challenged the bipolar monopoly on nuclear capability and indirectly asserted that the United States and Soviet Union were not able to control all political disagreements at the international level.

The arrival of President Kennedy in 1961 sparked a shift in national security policy. Kennedy was "shocked to discover the only war plan Eisenhower had left behind would have required the simultaneous use of well over 3,000 nuclear weapons against all communist countries."[31] Kennedy wanted to develop a spectrum of possibilities for how nuclear war might be fought as well as counter the rapid number of insurgencies in bloom around the world. The administration "adopted the concept of Flexible Response as the foundation of its defense policy, meeting communist military threats with the appropriate force."[32] Some of the Services were reluctant to change course and alter the way they had been constructing their forces over the past eight years.

Events such as the Bay of Pigs catastrophe in Cuba and the construction of the Berlin Wall later that year tested the political resolve and policy of the Kennedy administration. Although hi administration's confidence was bruised, President Kennedy held fast to his Flexible Response policy. Calling Khrushchev's bluff in the fall of 1961, he stated, "We have a second strike capability which is at least as extensive as what the Soviets can deliver by striking first. Therefore, we are confident that the Soviets will not

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[29] Craig, *Destroying the Village*, 83.
[30] Gaddis, *The Cold War*, 137.
[31] Gaddis, *The Cold War*, 75.
[32] Millet and Maslowski, *For the Common Defense*, 530.

provoke a major nuclear conflict."[33] This reinforced the Air Force's dominant position in national security policy since the credibility of Kennedy's statement rested primarily in the Service's nuclear delivery vehicles.

The new administration felt compelled to reform the Services and attempted to do so by initiating new security policies. Secretary of Defense Robert McNamara initially proposed a "no cities" nuclear response, in which only military targets would be attacked, to coincide with the Flexible Response policy. This was an attempt to incorporate a graduated nuclear response to Soviet aggression, providing the administration more tools to coerce and influence the opponent.[34] Following the Cuban Missile Crisis in October to November of 1962, McNamara came to conclude there were some serious implications to his proposal. Shortly thereafter, he proposed Mutually Assured Destruction (MAD), gravitating away from the "no cities" strategy and instead holding civilian populations at risk by making them the primary targets. This assumption was derived from two logical conclusions. First, it was impractical to build a force large enough to target the ever-increasing array of Soviet military targets. Secondly, the devastation and destruction that would rain down on the populations of both countries would deter war. Reducing the target sets limited the amount of equipment necessary to carry out the attacks. The magnitude of destruction was also intended to constrain the opponent from engaging in conflict, leaving ground forces free to focus on the limited conflicts between small and medium powers. The Services rejected the shift in the administration's new philosophy and refused to alter their perspectives on the strategic landscape, instead ossifying in their particular roles. Under the Kennedy and McNamara concept, the sword got longer and sharper, but a dagger to dispatch lesser opponents in small wars ostensibly replaced the shield. The Air Force's sense of independence and importance was magnified, while the Army recoiled at taking on a mission traditionally associated with the Marine Corps.

Summary

In the years leading up to the Vietnam War, the Services operated under two primary national security policies, The New Look (which evolved into an immature amalgamation of Massive Retaliation and Flexible Response) and Flexible Response.

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[33] Gaddis, *The Cold War,* 75.
[34] Craig, *Destroying the Village,* 157-158.

The political leaders and administrations that devised these policies surveyed the threats displayed in the world around them and produced a policy consistent with economic and military means at their disposal. The Eisenhower administration devised the New Look policy on the basis of a nuclear parity, American advantage in delivery systems, and Soviet conventional force advantage. The NATO security policy adopted an infantile form of flexible response by promoting the potential for tactical nuclear capability among the ground forces and orienting them toward a potential limited conflict. Under the Kennedy administration, Flexible Response became a domestic security policy based on a need to respond to various incidents in the Middle East, Asia, and Europe. President Kennedy also introduced a counterinsurgency initiative, soliciting another military tool to respond to local hostilities.

Throughout this period of time the Air Force and Army were able to align and orient their forces toward the security policy that best fit how they viewed their roles and perceived the most-dangerous scenario. The Air Force, believing the New Look policy was designed specifically for it, attempted to resist the Kennedy administrations' efforts to alter course. The Army, vindicated after years of advocating for Flexible Response, gained confidence in its abilities to fight along the spectrum of conflict, but it fell somewhat shy of endorsing a counterinsurgency capability. The Services pursued the policy best suited for their perception of the Soviet threat and the role to counter it. This divergence became visible in the most-dangerous scenarios envisioned and had dramatic effect on the cooperation in the CAS mission.

Most-Dangerous Scenarios

The Air Force and Army, aware of the defined national threat, devised distinct most-dangerous scenarios relative to their individual perspectives. The Service's purpose and roles further influenced the construction of the most-dangerous scenario. This materialization of the threat provided each service the gauge from which to organize, train and equip. Therefore, a combination of the national security concerns, the Service's perceived purpose, and its roles determined what the Air Force and Army viewed as the most-dangerous scenario. The previous section identified how the national security threat

and future warfare were perceived prior to Vietnam. The next section describes the most-dangerous scenarios the Air Force and Army derived from these views.

Air Force

The Air Force came out of the Korean War nearly three times larger than it was when it entered, but the force structure had deviated from its pre-war most-dangerous scenario. The announcement of the New Look policy thrust the Air Force strategic mission back to the forefront of national security policy. Senior leaders in the Air Force were consistently commenting on how air power's capabilities had been formally recognized in national policy.[35] The Air Force ran with this interpretation and set out to codify the thinking behind it. The first Air Force doctrine, AFM 1-2, published in early 1953, accomplished that aim. The belief was pronounced, "The defeat and annihilation of opposing surface forces is no longer a fixed prerequisite to the achievement of national objectives. Air forces can swiftly cross the areas of surface conflict, strike at vital elements of a hostile nation, and reduce its capacity to continue the conflict."[36] The opening sections of AFM 1-2 explicitly state, "air power by the end of [WWII] became the dominant implement of war."[37] Focusing on the Soviet threat to the nation and the desire to replace the deficiency of manpower with firepower, the Air Force reaffirmed that its mission was to "launch a large nuclear attack against the Soviet Union before the Soviets could respond in kind."[38] To be successful, it soon became apparent the Air Force would have to target all of the Soviet installations capable of supporting nuclear air attacks.

The Air Force's most-dangerous scenario reflects a near replica of the scenario postulated during the years between WWII and Korea. Between Korea and Vietnam, the most-dangerous scenario was the inability for the Air Force to stop, delay, or end aggressive actions by the Soviets against the United States or its allies. General Curtis LeMay asserted, "The bombers would catch the Russian planes on the ground and

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[35] Futrell, *Ideas, Concepts, Doctrine*, 433.
[36] Air Force, "Air Doctrine: Theater Air Operations" (Department of the Air Force, April 1, 1954), 2-3.
[37] AFM 1-2, Theater Air Operations, 2.
[38] Campbell Craig, *Destroying the Village: Eisenhower and Thermonuclear War* (New York, New York: Columbia University Press, 1998), 36.

destroy them and their bases as well as the industries that produced them."[39] The Air Force determined the most effective way to counter an attack, primarily on the United States, was to destroy the means the Soviets had to execute an air attack. "The first enemy targets that would have to be destroyed are the bases of the Soviet long-range air force. Destruction of these targets is the number one task of the Strategic Air Command."[40] Focusing on Soviet strategic forces as the primary targets, the Air Force had to increase its strike assets as the Soviet Union expanded its capability and number of military targets.

Increased severity, related to amplified Soviet capability, marks the difference in the perceived most-dangerous scenario between the run-ups to Korea and Vietnam. "By 1953, [the Air Force] had to target Soviet nuclear forces and weapons facilities and the Soviet air and ground forces that threatened NATO. As a series of strategic-scientific study groups reported, the proliferation of Soviet nuclear forces multiplied the target list and the number of aircraft and bombs SAC would need to make retaliation both a credible threat and plausible instrument for war fighting."[41] The Joint Chiefs of Staff gave credence to the Air Force's scenario when they called for the Air Force to "prevent an enemy nation from launching an atomic attack against the United States."[42] The Air Force felt obligated to structure itself so that its "primary objective should be to win the battle against Soviet air power. This means a bigger and better SAC because the bomber airplane is the best delivery vehicle to triumph in this battle against Soviet air power."[43]

Along with the requirement to provide strategic nuclear strike capability, the Joint Chiefs of Staff also charged the Air Force to "retard the massing and launching of Soviet ground forces."[44] This placed a dual charter on the Air Force mission, attaching the national security policy and the NATO defense policy to its role. According to "Project Vista, a high level study, the defense of Europe required 10,000 tactical aircraft, some

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[39] Neil Sheehan, *A Fiery Peace in a Cold War: Bernard Schriever and the Ultimate Weapon* (New York, New York: Vintage Books, 2009), 145.
[40] Sheehan, *A Fiery Peace in a Cold War*, 151.
[41] Millet and Maslowski, *For the Common Defense*, 494.
[42] Futrell, *Ideas, Concepts, Doctrine*, 434.
[43] Sheehan, *A Fiery Peace in a Cold War*, 145.
[44] Futrell, *Ideas, Concepts, Doctrine*, 434.

nuclear capable, to offset ground forces' inferiority."[45] This requirement did not redirect the Air Force toward a different most-dangerous scenario; it only reinforced doctrinal beliefs that it was necessary to strike the enemy at the heart of its war-making capability to prevent ground forces from coming in contact. An Air War College Evaluation Staff analysis cited, "the objective of deterring all-out war demanded continuing ability to deliver nuclear weapons to the heart of the Soviet Union."[46] Throughout the decade this was reflected in the planning, where SAC was to end up programming more than twenty-five megatons for Moscow alone and build its stockpile of nuclear weapons to over 20,000 megatons, and continue an emphasis on targeting Soviet nuclear forces classified in the first *Single Integrated Operational Plan* (SIOP)."[47]

The arrival of the Kennedy administration and the new policy of Flexible Response did not dissuade the Air Force from its most-dangerous scenario. In an assessment of Soviet intentions and capabilities in 1961, the CIA pointed out that the Soviets did not indicate aggressive offensive aims. The report presented, "From what we know of Soviet ideas, however, we conclude that during the next five years—and perhaps longer—the Soviet leaders will conceive of their long-range striking capability in terms of deterrence and of employment in a heavy blow should they finally conclude that deterrence had failed, rather than in terms of the deliberate initiation of general war. In their view, a condition of mutual deterrence will provide an umbrella under which they can wage a vigorous campaign, using a wide variety of methods, throughout the non-Communist world."[48] A footnote to this passage exclaimed that certain organizations within the military, specifically the Assistant Chief of Staff, military intelligence, and the Air Force, did not agree with this statement. It read, "It is his belief that the evidence of offensive missile and bomber production and deployment shows a definite intent by the Soviet rulers to achieve a clear military superiority at the earliest practicable date."[49]

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[45] Millet and Maslowski, *For the Common Defense*, 494.
[46] Futrell, *Ideas, Concepts, Doctrine,* 445.
[47] Millet and Maslowski, *For the Common Defense*, 519
[48] David S. Patterson, "Foreign Relations of the United States, 1961-1963, National Security Policy, Volume III" (United States Government Printing Office, 1997), accessed April 11, 2014, http://history.state.gov/historicaldocuments/frus1961-63v07-09mSupp.
[49] Ibid.

Denying the Soviets had anything but offensive intentions, the Air Force held fast to its most-dangerous scenario.

Army

Following the Korean War, the Army resumed its primary mission of fighting the expected war in Europe. The New Look policy with its strict reliance on nuclear over conventional means and the pervasive belief that the next war would be a general war, presented the Army with the challenge of finding relevance. Under this assumption, there was little need for a large overseas presence and a large standing Army. President Eisenhower and Secretary of Defense Charles Wilson were adamant about reducing the Army's personnel. The mandate to Chief of Staff of the Army, General Matthew B. Ridgeway, was to reduce the Army from 1.5 million men to 1 million by 1957.[50] The NATO agreement to rearm Western Germany starting in 1954 gave Secretary Wilson leverage to argue for moving the Army timetable up to 1956, suggesting the new German Army would offset the reduction in American ground forces in Europe.

The overwhelming number of Soviet conventional forces and the continual reduction in United States military budgets had ingrained in political and military leaders' thinking that victory was possible only with a reliance on nuclear firepower over manpower. The Army recognized that the focus on general war and strategic nuclear deterrence in Massive Retaliation was aimed only at preventing a massive nuclear exchange. Even if the Soviets attempted to overrun Europe using conventional means only, NATO would be forced to respond with nuclear weapons because of the Soviet conventional advantage. This was documented in NATO MC-48, "There is a remote possibility that the Soviets might attempt to take advantage of their preponderance in land and tactical air forces to overrun Europe without employing atomic weapons in the hope that by so doing the Allies would also refrain from using these weapons. In this contingency our studies indicate that NATO would be unable to prevent the rapid overrunning of Europe unless NATO immediately employed these weapons both strategically and tactically." The Army stationed in Germany ultimately became a trip

[50] Ingo Trauschweizer, *The Cold War U.S. Army: Building Deterrence for Limited War* (Lawrence, Kansas: University Press of Kansas, 2008), 30.

wire for nuclear war.[51] Recognizing this function, the Army began to question whether it could provide a capability beyond triggering general war.

In 1954 several political and military leaders alike were concluding that the strategic nuclear umbrella set up by symmetric thermonuclear capabilities opened the door for limited and local wars. With the responsibility of supporting alliances, such as NATO and defending the territory of Western Europe in the event of Soviet aggression, the Army gained a different perspective of the future conflict. Specifically, the FAIRFAX Plan, crafted in 1953, called for "survival of the United Kingdom base and western Europe in the initial phase of overwhelming importance…[to include] the holding of the front in Western Europe." [52] Later that year, the Army acquired 280-mm atomic canon, providing ground forces with tactical atomic capability. These factors contributed to the Army accepting the possibility for limited conflicts to transpire and realizing it had a role to play in countering them. These beliefs were codified in FM 100-5 in September 1954.[53] By the summer of 1955, Army Chief of Staff Maxwell Taylor had proposed a new strategy titled "Flexible Response". This proposal was further instigated by two realities. First the United States had made defense commitments to countries worldwide. Second, the Soviets had achieved near nuclear parity, with both sides holding atomic plenty; and, for communism to continue to spread, the Soviets would adopt different tactics using limited forms of aggression.[54] General Taylor's recommendation was to build a tri-dimensional deterrent where air, sea, and land forces would be able to combat the full spectrum of conflict. The development of atomic surface-to-surface weapons was a linchpin in aiding the Army to gain a stronger foothold in the national strategy. This capability presented the Army the means to deter conventional forces, especially Soviet ground forces. With this vision in mind, the Army set out to prepare its forces for a European conflict and anything less than one volley from a massive nuclear armada.

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[51] Elliot V. Converse III, *History of Acquisition in the Department of Defense: Rearming for the Cold War 1945-1960*, vol. 1, 2 vols. (Washington, D.C.: Historical Office of the Secretary of Defense, 2012), 595.
[52] Ingo Trauschweizer, *The Cold War U.S. Army: Building Deterrence for Limited War* (Lawrence, Kansas: University Press of Kansas, 2008), 28.
[53] Trauschweizer, *The Cold War U.S. Army*, 21.
[54] Futrell, *Ideas, Concepts, Doctrine*, 454.

Using a mixed force of conventional and tactical atomic weapons, the Army aimed to deter the Soviets from attempting limited war in Western Europe. This drove the Army to organize, train, and equip its forces for a limited war using both conventional and nuclear means to defeat the Soviets. The term limited war today is used slightly differently than in the 1950s. Back then limited war was anything shy of general war, but was still considered a traditional force-on-force battle; and there was the possibility both atomic and conventional weapons would be used. This was a contentious issue among military and political leaders; many had fully placed their trust in the idea that war could only result in general, full-scale nuclear war. Inside the Pentagon there was some dissent regarding the extreme nature of the policy and its shared assumptions. "With the notable exception of the Air Force, all military services agreed that limited war was possible."[55] However the preponderance of policymakers from the Secretary of Defense to the President discounted the need to fight locally, since the evolution of a conflict would logically result in nuclear volleys. Therefore, a strong nuclear deterrent was sufficient to prevent general as well as local wars. Secretary Wilson contended, "The free world has to rely on its collective strength not only to beat back any local aggression but to deter the aggressor from broadening the conflict into global war."[56]

Several senior leaders continued to discount the credibility of a nuclear stalemate setting the conditions for the Soviets or its satellite states to capitalize on an opportunity to act aggressively. Knowing the consequences, many assumed this was just irrational. The Army, given the charge to defend Western Europe, had to take into consideration the possibility of the Soviets or satellite states using limited aggression to exert their will. Depending on the incident, this event could lead to general war. In an effort to prevent miscalculation and eventual nuclear suicide, the Army felt compelled to present a force capable of deterring even small wars. Therefore, the Army's most-dangerous scenario was the failure to deter Soviet attempts to use limited force to achieve limited objectives under a nuclear stalemate on European soil.

Specific to the Army's response to this most-dangerous scenario were strategically mobile ground forces equipped with both conventional and atomic weapons

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[55] Trauschweizer, *The Cold War U.S. Army*, 3.
[56] Futrell, *Ideas, Concepts, Doctrine*, 454.

that would be capable of halting limited aggression and in turn preventing the escalation to general war. Lt General James M. Gavin, chief of Army research and development claimed, "If a small war does occur, we must win such a war for failure to win would in itself bring on a general war."[57] Flexible response required the Army to modernize and become extremely mobile. Since both sides were expected to have atomic weapons the forces would need to have long-range firepower and would need to be able to disperse rapidly to dissolve themselves as target sets. By using strategic mobility, the Army felt it could contain or delay Soviet advances and force them to concentrate forces, creating targets for atomic retaliation. The key: this could be done only with the proper configuration of firepower, movement, and skilled personnel.

The most-dangerous scenario resulted in a reorganization of the Army force structure. The study, Doctrinal and Organizational Concepts for Atomic-Nonatomic Army During the Period 1960-1970, commonly referred to as PENTANA, provided the structure needed to sustain European ground operations.[58] A key to this concept was air mobility, because the Army knew it must find a way to disperse and regroup rapidly to prevent offering a concentrated target for the Soviets. With mobility came the need to have transportable firepower and artillery. Devising the doctrine and force structure the Army thought was crucial to its most-dangerous scenario would become a source of friction and conflict between the Services.

Crisis

This section is an examination of some of the events triggering crises from the end of Korea to the start of Vietnam. It is unreasonable, in this chapter alone, to capture all of the events that triggered a crisis in the decade between the two wars. The sheer number of technological leaps, the changes in leadership domestically and internationally, and inter-service disagreements present enough material to comprise an entire study on its own. For the purpose of this paper, three primary triggers that impacted the Air Force and Army's relationship and close air support stand out. They include rigid budgets, rapid technological developments, and shifting policies associated

[57] Futrell, *Ideas, Concepts, Doctrine*, 456.
[58] Trauschweizer, *The Cold War U.S. Army*, 52.

with a new administration.

Similar to the last case study, the military budget presented uncertainty, urgency, and a threat to the basic values of the Air Force. Interestingly, it wasn't a significant reduction in funding that triggered the crisis; it was a lack of flexibility in the budget combined with the implemental mindset that triggered the crisis. A high degree of rigidity in budget outlays was confounded by the various military advancements made every two years by the Soviets. These technological developments boosted Soviet offensive capability, and the Air Force was confronted with a crisis of uncertainty, urgency, and threat to basic values. Finally, the arrival of the Kennedy administration and the policy of Flexible Response threatened the Air Force's dominant status in national security, adding a third existential crisis to the two previously mentioned. As portrayed briefly here, the triggers each spanned a period of time, resulting in a cumulative effect that kept the Air Force in continual implemental mindset. This sent the Air Force ever back to its familiar most-dangerous scenario and well established role, affecting its approach to each crisis and its ability to cooperate with the Army. The Army was also in a state of continual crisis during this period, which drove it toward its own most-dangerous scenario. As the Services faced the crises and retreated into their most-dangerous scenarios and the roles necessary to combat the opponent, they moved away from common ground and further from cooperation, despite the fact that it became even more vital to establish avenues of cooperation, especially regarding the CAS mission.

Budget

Similar to previous post-war experiences, political leaders were under pressure to reduce spending and enforce strict budgets for the military. The Air Force benefited substantially from a sharp increase in funding due to the Soviets' detonation of its atomic bomb in 1949 and the unveiling of Truman's NSC-68 rearmament program. Then the Korean War tripled the defense budget from roughly $13 billion to over $30 billion, accounting for just over 13% of the nation's gross domestic product.[59] Before the end of

[59] Stephen Daggett, *Cost of Major U.S. Wars* (Washington, D.C.: Congressional Research Service, June 29, 2010), 2, accessed April 11, 2014, http://www.fas.org/sgp/crs/natsec/RS22926.pdf.

the Korean War, the Air Force had initiated plans for a 143-wing program that was expected to be $28.5 billion dollars over current budget.[60] The expectation of continued build-up and budget increases did not occur. When the newly elected President halted all military construction in February 1953, uncertainty washed over the Air Force and there was concern it would not be authorized to continue its build-up. Although only $5 billion were taken from the FY54 budget, the production posed a threat to the scheduled build-up of the Air Force 143-wing program.[61] The Air Force had established the wing goal in light of the "year of maximum destruction" (1955). Knowing the upcoming budgets would not allow the United States to meet these artificial goals, Eisenhower moved the date of major aggression to a floating D-day.[62] After this he was able to consistently cap the military budget at approximately $40 billion per year through 1959. Although the intention was to provide stability and reduce the inclination of Services to fight over funding, it created more competition. Each Service saw the capped budget as a very limited pie and it became urgent to secure the maximum amount possible to meet its needs.

Instead of a fixed budget producing stability and cooperation, the budget measures led the Air Force to become sensitive to every Soviet enhancement. Rather than working toward a fixed "dooms date," as unrealistic as it was, surprises in Soviet capability were perceived as aggression, and there was impetus to prepare for the uncertainty in the present. General Vandenberg emphasized this when he said; "Rather than reduce our efforts to attain air superiority over the Communists, we should now increase those efforts."[63] The fixed budget coinciding with the floating D-Day elevated the internal threat to each Service's basic values. Under this framework, the Air Force, viewing its paramount role in national security, was determined to fight for every penny and every capability. It could be argued that the Air Force was not in crisis over the budget because its share tripled from 1950 to 1957 ($5.2 billion to $16.5 billion)[64] and consistently "averaged more than 44% of the overall defense budget from FY55 through

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[60] Futrell, *Ideas, Concepts, Doctrine*, 419.
[61] Millet and Maslowski, *For the Common Defense*, 511.
[62] Futrell, *Ideas, Concepts, Doctrine*, 421-422.
[63] Futrell, *Ideas, Concepts, Doctrine*, 422.
[64] Trauschweizer, *The Cold War U.S. Army*, 29.

FY61."[65] Even under these circumstances, the conditions set by the Eisenhower administration were perceived to cause uncertainty and urgency threatening the role the Air Force had imagined in its most-dangerous scenario, especially as Soviet capabilities continued to improve.

Technological Advancements

The New Look policy was based on the belief the United States would maintain a level of superiority in advanced technology. This arrogance led the to a consistent failure to predict accurately the pace at which the Soviets would make technological advancements. Within a year of the United States testing its first thermonuclear bomb, the Soviet Union had detonated one that produced even greater destructive power. Although the Soviets' acquisition of this technology was devastating, they lacked the means to deliver the weapon. It was assumed in early 1955 the Soviets would not obtain a sufficient counter to the United States strategic offensive bomber force until the 1960s. Shockingly, at the May Day ceremonies in Moscow, the Soviets revealed jet bombers, their new four-engine Mia-4 Bison.[66] This led to the prediction the Soviets would produce roughly 700 Bison aircraft within the next four to five years. To add to this, it was reported the Soviet Union was also developing a four-engine turboprop TU-95 Bear bomber, scheduled to be in service by 1956.[67] Secretary Wilson captured the impact of this demonstration, claiming the appearance of these platforms indicated the Soviet Air Force was no longer strictly defensive, but instead had offensive intentions. The United States Air Force was confronted with an immense sense of urgency and uncertainty. According to its most-dangerous scenario, SAC was responsible for targeting the Soviet's nuclear capabilities, and as the number of vehicles and platforms grew, the target list continued to expand. To counter this threat, the Air Force felt compelled to produce a comparable number of aircraft for each target set.

The Soviets' test of their first airdropped thermonuclear bomb in November 1955

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[65] Elliot V. Converse III, *History of Acquisition in the Department of Defense: Rearming for the Cold War 1945-1960*, vol. 1, 2 vols. (Washington, D.C.: Historical Office of the Secretary of Defense, 2012), 459.
[66] Sheehan, *A Fiery Peace in a Cold War*, 150.
[67] Sheehan, *A Fiery Peace in a Cold War*, 150.

further compounded the need for the Air Force to rapidly strike its red opponent.[68] The Soviet combination of strategic bombers and thermonuclear weapons parried the Air Force's strategic nuclear attack role and reinforced the severity of the most-dangerous scenario.

The Air Force's basic values became threatened as the rise in Soviet capability in the mid-1950s brought into question the credibility behind the United States' deterrent strength. The Air Force adamantly argued that strategic nuclear capability was sufficient for deterring all forms of war from general to limited. A shift in Soviet capabilities led people to further question the sufficiency of the United States' deterrent capability in preventing limited or local wars. In February 1957, General Twining stated, "The threat of limited war has increased because the Soviets have acquired a greater capability to wage general war, and can therefore, undertake limited aggression with less fear of total retaliation."[69] The Air Force, operating in its implemental mindset, was driven to prove the efficacy of its role.

Within the year of General Twining's statement, the Air Force's role in halting Soviet aggression would be challenged again when the Soviet Union launched its first intercontinental ballistic missile (ICBM). With Sputnik, launched in October 1957, the Soviets had the capability to launch a nuclear missile at any target in the United States, and arrive in a mere 30 minutes.[70] "Sputnik surprised intelligence experts who did not expect the SS-6 to be operational before 1960."[71] According to White House documents, the success of the Sputnik launch demonstrated "scientific and technical leadership by those with the least scientific and political sophistication."[72] The "bomber gap" scare was replaced with a "missile gap" when the CIA reported Soviets would have 500 ICBMs by 1961.[73] A few years later, in May 1960, the Soviets demonstrated a

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[68] Gaddis, *The Cold War*, 68.
[69] Futrell, *Ideas, Concepts, Doctrine*, 451.
[70] Gaddis, *The Cold War*, 68.
[71] Millet and Maslowski, *For the Common Defense*, 515.
[72] White House Staff Research Group, "Reaction to the Soviet Satellite - A Preliminary Evaluation", October 16, 1957, 1, accessed April 2, 2014, http://www.eisenhower.archives.gov/research/online_documents/sputnik/Reaction.pdf.
[73] Gaddis, *The Cold War*, 73.

formidable air defense system when an SA-2 shot down Captain Gary Powers' U-2.[74] Missile technology challenged the effectiveness of the bombers, which were no longer seen as sufficient to respond to a nuclear missile threat, and this struck right at the heart of the United States' premier deterrent capability and the Air Force's role. For the Air Force, the introduction of the missile altered the temporal element of its most-dangerous scenario, not the mechanics, but increased the urgency to secure its counter role. For this reason, the crisis reinforced the severity of the scenario and required the Air Force to incorporate missiles with the bombers to counter the threat.

Technological advancements domestically also triggered a crisis for the Air Force. By 1954, the Army had successfully tested surface-to-surface missiles. Within two years the Army had developed missiles capable of traveling up to 1500 miles. The Air Force feared that the Army's long-range missiles might be used to attack strategic targets. This was a threat to the Air Force's basic values and role in its most dangerous scenario, and was seen as "weakening the Air Force's responsibility for area defense of the continent."[75] The uncertainty of the Army's intentions with this new technology placed a level of urgency on the Air Force to secure its roles and responsibilities. Now lacking a monopoly on technological advancements, the Air Force was driven toward its roots and emphasis on its predominance in providing strategic offensive capabilities vital to counter the perceived most dangerous threat.

Administration

The arrival of the Kennedy administration brought with it a significant shift in national security policy. Although General Ridgeway had perpetuated the concept of flexible response as early as 1955, the institutional view among political and military leaders excluded the possibility of limited conflict in an era of nuclear weapons. The first national security policy document published after the change in administration, however, specifically acknowledged the need to prepare military forces for limited wars. The document read, "It is now widely held that, in order to prevent such a paralyzing choice

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[74] Elliot V. Converse III, *History of Acquisition in the Department of Defense: Rearming for the Cold War 1945-1960*, vol. 1, 2 vols. (Washington, D.C.: Historical Office of the Secretary of Defense, 2012), 459.
[75] Converse III, *Rearming the Cold War 1945-1960, Volume I*, 1: 599.

from being presented, it is necessary to have limited war capabilities, so that comparatively minor threats can be countered with appropriate means."[76] With increased commitment to Flexible Response, it was argued that "the United States needed a two and a half war conventional force capability that would allow it to mount a successful defense of north Asia, Europe, and any insurgency-threatened state within is alliance system."[77]

This vision of future war was perceived to be in direct opposition to the Air Force's most-dangerous scenario and its premier role in countering America's enemy. This trigger presented a cascading series of crises with which the Air Force had to contend. First, Secretary of Defense Robert McNamara was opposed to the budget-ceiling concept instituted by President Eisenhower and switched to a requirements-based process.[78] In doing so he "redirected strategic force planning by checking the Air Force's bomber program; he cancelled the B-70 supersonic, high-altitude bomber and the Skybolt bomber-carried missile."[79] Secretary McNamara's "systems analysis" approach to determining both quantity and capability of all weapons systems altered many of the requests submitted by the Air Force.

Summary

The decade between the Korean and Vietnam Wars presented the Air Force with a variety of crises challenging its role and perception of the security environment. The threat loomed large in the eyes of many military leaders. For the first time since WWII the United States was humbled by the fact that it was technologically behind its opponent. The Soviet Union was consistently flexing its scientific muscles, sending blows across the ocean at a Service that prided itself in its technical might. As each year went on the Air Force found itself trying to compete, as expenses to match weight grew and budgets remained capped. To add insult to injury, when the new administration

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[76] Patterson, "Foreign Relations of the United States, 1961-1963."
[77] Millet and Maslowski, *For the Common Defense*, 535.
[78] Walter S. Poole, *History of Acquisition in the Department of Defense: Adapting to Flexible Response, 1960-1968*, ed. Glen R. Asner, vol. 2, 2 vols. (Washington, D.C.: Historical Office of the Secretary of Defense, 2013), 21.
[79] Millet and Maslowski, *For the Common Defense*, 534.

entered office in the early 1960s, the political leaders entered the ring, dictating a new way of fighting. Heavyweight strategic nuclear warfare would no longer be the main event; a flexible response matching the opponent's blows would be the new focus. Parrying with the enemy did not match the role and scenario the Air Force had trained for. Holding fast to a long-held most-dangerous scenario, the cumulative effect of rigid budgets, Soviet technological advances and policy changes locked the Air Force into the implemental mindset, affecting its relationship with the Army.

Inter-service Relations

This section examines the Air Force's response to the crises it experienced and the impact they had on inter-service cooperation in CAS. The analysis will focus specifically on how decisions regarding the Air Force's organization, training, and aircraft procurement affected the close air support mission. Lina Svedin's criteria for detecting cooperation or conflict remain the backbone to the investigation. Entrenched in its most-dangerous scenario, the Air Force set out on a path discarding the lessons, regenerated from WWII, of close air support in Korea. The Air Force's myopic focus on Massive Retaliation and the Army's pursuit of an independent flexible-response capability nearly destroyed the seedling of cooperation rooted in the Korean War. From the conclusion of the Korean War to the opening of conventional hostilities in the Vietnam War, decisions were made that required the Services to recover trust and confidence with one another, especially over the CAS mission.

Organization

The stalemate and inconclusive end of the Korean War along with and the advances in both the destructive power and delivery of nuclear weaponry drove many in the Air Force to reconsider the purpose and practicality of retaining TAC. Predisposed to see everything through the lens of general war, suggestions were made to redesign the force structure, with a proposal to create Strategic-Tactical Command (STAC) or Air Offensive Command. The appearance of the Bison and Bear aircraft confirmed the perception that the Soviets were destined to turn their strategic offensive capability on the United States, and therefore tactical assets would have little role in the fight. Once aggression occurred, it was expected, the United States would deploy its full arsenal of

nuclear weapons toward Mother Russia. Even if war was initiated from limited Soviet aggression, the Air Force was convinced and encouraged to respond with a nuclear exchange. The Bison and Bear triggered a crisis challenging whether or not the Air Force had a sufficient number of strategic aircraft to counter the opponent's offensive capability with a preemptive strike. There was a perceived "bomber gap," and, with the capped budget ceilings, the Air Force was forced to look for solutions.

Turing inward, the Air Force went in search the dollars necessary to catch up to the alleged Soviet bomber superiority. Sensing the hunt, organizations within the Air Force began to immediately reorient their purpose to the most-dangerous scenario, or risk becoming the institutions' prey. Senior leaders within TAC began to advocate for a renewed purpose and mission set. Deputy Commander of TAC's Ninth Air Force, Brig. General James Ferguson believed, "tactical aviation should no longer serve as long range artillery, when it might play an important role in the strategic mission."[80] The Air Force agreed with the decision for TAC to fully invest in the nuclear pie, bolstering its relevancy as well as increasing the assets on hand to participate in the most-dangerous scenario.

Reorganizing TAC to carry both nuclear and conventional capabilities eventually positioned the tactical forces to lean toward the mission of deep interdiction, leaving the CAS missions to its peripheral vision. Focusing on deep interdiction, TAC remained relevant to both the Air Force and the Army since it could augment the nuclear capability of SAC and still provide support for the ground forces in the European theater in a general-war scenario. The political tolerance of employing tactical nuclear weapons in protection of NATO boosted a nuclear-capable TAC. As the comfort of using tactical nuclear weapons in conflict grew, TAC devised a strategy for remaining relevant. In 1956, TAC was organized into Composite Air Strike Forces (CASF), "which combined the nuclear power of national policy with the mobility and flexibility needed to support ground forces anywhere in the world."[81] TAC wanted to present a dynamic force capable of mobilizing quickly in support of all theaters, even though the primary focus remained

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[80] Bernard C. Nalty, ed., *Winged Shield, Winged Sword: A History of the United States Air Force Volume II 1950-1997* (Washington, D.C.: Air Force History and Museums Program, 1997), 104.
[81] Schlight, *Help From Above,* 183.

on Europe. "There was general agreement in the Air Force that future war would allow little or no time for mobilization."[82] Under the thinking of "No More Koreas," it was believed the political leadership would be willing to employ nuclear weapons in any area of operation. Much like the aircraft the Air Force preferred for CAS, TAC became the multi-role force.

Fully expecting to use tactical nuclear weapons to deter the escalation of lesser wars, the CASF was designed to deploy immediately into conflict areas to meet the threat. Operating under this political climate, General Otto P. Weyland, TAC Commander, argued that the Air Force could not risk its strategic assets on brushfire wars. Witnessing the rise of local conflicts in the mid-1950s, he cautioned, "SAC forces are not suited for and cannot cope with the essentially tactical air aspects of local wars. Nor should they become seriously involved in a local war, since they would jeopardize their effect as a major deterrent in war."[83] The Air Force overtly valued its SAC assets over the TAC assets, but as TAC became SAC-light, it gained status within the Air Force. Unfortunately, TAC's transition to a nuclear force put distance between the Air Force and the Army.

The Army was cognizant of the organizational shift occurring in TAC and perceived it as a rejection of the command's mission to provide support directly to the ground forces. The tactical aviation forces were not only obligated to provide CAS, but also airlift, reconnaissance, as well as interdiction. Under the new vision of TAC's nuclear role, the organization was focused on supplying assets for SAC's second priority: theater counterair strikes, targeting Soviet and Warsaw Pact air forces and airfields. General Weyland promoted the ability for TAC to take over this role and it would "be responsible for attacks on enemy military forces and materials in being, en route to or in battle."[84] This statement appears to encompass CAS missions by wrapping targets "in battle" into the statement. The reality of using tactical nuclear weapons meant the aircraft could not drop ordinance in close proximity to friendly forces or risk damage to those troops. Therefore if an aircraft were loaded with nuclear weapons it would be

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[82] Futrell, *Ideas, Concepts, Doctrine,* 436.
[83] Futrell, *Ideas, Concepts, Doctrine*: *1907-1960*, I: 450.
[84] Futrell, *Ideas, Concepts, Doctrine*: *1907-1960*, I: 437

unable to transition to CAS unless it landed and was armed with conventional munitions. The Army fully understood the implications of this, which stung at the heart of its primary fear; the Air Force would continually allocate assets away from ground support. Instead of this being a tacit threat, the perception of aircraft configured to drop atomic weapons on predetermined target sets, unable to transition to CAS missions, made it concrete. TAC's organizational decision incidentally rejected the role it would play in support of the ground troops. This would be one of the main reasons the Army would pursue Sky Cavalry and organic tactical assets capable of performing direct support functions. The seeds of conflict were sown in TAC's reorganization of priorities in adherence to the Air Force's most-dangerous scenario.

The Air Force had built up to a 93-wing program by 1953 using the rearmament funding. It had received a third more funds ($20.6 billion) than the Army ($13.2 billion) and Navy ($12.6 billion).[85] But in reality, the Air Force needed an even larger force structure to satisfy the assumption that the war would be fought only with what was currently available. Since the conflict would not be a drawn-out event and the destruction of resources would occur so rapidly, it was imperative to have a sufficient force in being. Even before the conclusion of the Korean War, it had been agreed upon the Air Force would build 143 wings. The Joint Chiefs of Staff proposed to cut the program down to 127 wings.[86] Surprisingly, in the midst of battles to secure the 143-wing program, the Air Staff had conducted a study showing that "more powerful thermonuclear weapons would permit some reductions in the strategic air forces."[87] The difference in weapons effect from fission atomic bombs to the thermonuclear fusion bombs and missiles was significant. The study attempted a slight backpedal by claiming the proposed cuts would be small, given the limited stockpile of weapons at that time. Even so there was still an indication that a thermonuclear payload would offset the need for an increased number of delivery vehicles.

A reduction in Air Force wings, which ultimately was a reduction in the number of bombers, was contrary to the response the Air Force had for its most-dangerous

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[85] Millet and Maslowski, *For the Common Defense*, 494.
[86] Futrell, *Ideas, Concepts, Doctrine: 1907-1960*, I: 426.
[87] Futrell, *Ideas, Concepts, Doctrine*: *1907-1960*, I: 425.

scenario. Sending strategic bombers to strike the war-making capabilities of the opponent, targeting the Soviet's strategic arsenal before they had the ability to respond, was the role it had since the Cold War began, and was ingrained in the basic values of the Air Force. Cutting these platforms was sacrilegious, especially under the crisis of the "bomber gap." The Air Force believed it was even more critical to have a large force in being since the Soviets could spread their nuclear capabilities out even further creating a larger target set. Therefore, the decision for FY59, when the Air Force was required to decrease from 117 to 105 wings, was to deactivate the tactical air wings.[88] The brunt of this deactivation fell on the airlift and transport forces. Once again, the Army witnessed a move away from providing the assets necessary for direct ground support. These decisions reinforced the Army's conviction that to have proper support, it would have to develop its own mobility assets to operate in its most-dangerous scenario. The logical follow-on was to devise a complete organization capable of providing mobility and firepower to transport and defend the Army units. Taking this step forward bred great distrust between the Services and created an atmosphere of persistent conflict, driving the Services further away from cooperation.

Toward the end of the 1950s, rooted in their most-dangerous scenarios, the Air Force and Army had gone their separate ways to pursue organizations, training, and equipment vital to their most-dangerous scenarios. Tensions were high from years of arguing over the Army's perceived mission creep in the areas of airlift and CAS; but, surprisingly, as the decade wore on, the Air Force and Army were able to make strides in in the latter. There were two contributing factors that assisted with pulling the Services back from complete conflict toward cooperation. The first factor was the arrival of missile technology and the rise and fall of conflict over missile defense. The second factor was that both Services had experienced setbacks when the solutions they provided the newly appointed political decision-makers failed to satisfy the given problem. These events shook each of them out of the extreme depths of their implemental mindset, allowing a little light to illuminate imperfections in their most-dangerous-scenario assumptions.

Throughout the mid to late 1950s, all the Services were dabbling in the research

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[88] Futrell, *Ideas, Concepts, Doctrine*: *1907-1960*, I: 527.

and development of missile technology. Secretary of Defense Charles E. Wilson fostered the Services' pursuit by "ordering an Army-Navy team work together on an intermediate range ballistic missile" and created the Air Force Ballistic Missile Committee.[89] The Army had come to believe missile technology would allow them to control the air over their ground forces and could even provide mobile defense of deployed forces. This belief helped compound the desire to build organic airlift and airborne attack platforms, limiting the Army's reliance on Air Force assets. Constrained budgets initially sparked inter-service dispute over the use of missiles in the European theater. Secretary Wilson attempted to resolve this by limiting the Army's missile development, restricting its missile ranges to 200 miles, coincident with the Army's combat zone of operation. The Air Force and Army were both satisfied with this restriction because it allowed each of them to use missiles for their individual most-dangerous scenarios. Although short- and medium-range missiles affected tactical air forces, the bigger concern was having Army missiles provide a strategic capability. Army's development of surface-to-surface missiles specifically for the combat zone actually benefited the Air Force. Now it was tenable for the Air Force to cut tactical air forces and use the funds for SAC and strategic assets. General White was confident, "that the Army could with its Corporals, Honest Johns, atomic artillery, and so on, supplant the tactical capability that we have eliminated."[90] By expressing approval for the Army's use of surface-to-surface missiles the Air Force was reinvigorating a cooperative relationship.

Running parallel to the growth of intercontinental-ballistic-missile capability for the European theater, political and military leaders were pursuing advances in missile technology for Continental defense. Soviet bomber and missile advances forced the nation to legitimately consider the possibility of Soviet attacks destroying the United States' way of life. The Killian report, *Meeting the Threat of Surprise Attack*, pointed to Soviet capabilities in early 1955, and indicated critical U.S. targets were relatively few saying that "200 nuclear bombs . . . would decisively defeat us and . . . a first attack could

[89] Futrell, *Ideas, Concepts, Doctrine*: *1907-1960*, I: 495.
[90] Futrell, *Ideas, Concepts, Doctrine*: *1907-1960*, I: 523.

be fatal if we were surprised and unprepared."[91] Following a series of organizational changes, President Eisenhower passed the Defense Reorganization Act of 1958, designating Continental Air Defense Command (CONAD) as a unified command. Creating a unified command muted some of the parochial debates between the Air Force and Army over homeland defense. Instead of two Services organizing, training, and equipping for different geographical regions of the United States, they are supplying one central command the resources necessary to protect the CONUS. Under this construct the Air Force was willing to shift air defense from an aircraft-only plan to aircraft plus ballistic missile defense. The Nike-Zeus anti-ICBM defense system was developed and managed by the Army. Supporting the Army's expansion of this program again allowed the Air Force to focus its resources on strategic missions and platforms necessary for its most-dangerous scenario. Establishment of CONAD as a unified command created a mutually beneficial relationship for the Army and Air Force, diffusing inter-service conflict by the Services making agreements on their roles and responsibilities for homeland defense.

A second factor in bringing the Air Force and Army out of the abyss of conflict was the arrival of Secretary McNamara and the new Flexible Response policy. Witnessing the lack of military options available to political leaders for successful operations in Lebanon and Taiwan, Secretary McNamara created United States STRIKE Command (USSTRICOM). The purpose of the Unified Command was to have a force capable of meeting various contingencies, from local aggression to general war. The command institutionalized Flexible Response. The main forces that made up USSTRICOM were Army CONAC combat units and TAC combat units. The new administrations' requirement for joint operations was a catalyst to help foster cooperative behavior between the Air Force and Army. Following USSTRICOM's inauguration in January 1962, contact between Air Force and Army personnel grew exponentially with the exchange of Forward Air Controllers (FACs), ground liaison officers, air liaison

[91] United States Army, *History of Strategic Air and Ballistic Missile Defense, Volume II 1956-1972*, Special Studies Series (Washington, D.C.: U.S. Army Center of Military History, 1975), 19.

officers, CAS briefing teams, and the staging of CAS competitions.[92] The Air Force began to mandate that each "12-aircraft TAC fighter squadron was required to have at least 10 fighter pilots fully qualified as FACs."[93] The dedication from TAC to create consistent contact with ground forces and promote CAS training and exercises was reminiscent of General Quesada's efforts with Army Ground Forces Command following WWII. The tactical attention paid to CAS during this time demonstrated significant cooperative behavior between the Services. This effort helped preserve the fading institutional CAS knowledge that would become vital in Vietnam.

Training

In an effort to validate the credibility of a nuclear tactical force, TAC and its Army counterpart, now called Continental Army Command (CONARC), scheduled a joint exercise in the fall of 1955. CONARC was responsible for all the active units and armies in the continental United States. As the precursor to the Army's Training and Doctrine Command (TRADOC), it was responsible for all the training centers, schools, and doctrine development. There was an effort to use some of the air-to-ground lessons garnered from the Korean War and pair them with advancing nuclear technologies. It was evident from the start that joint exercise SAGE BRUSH would fall short of meeting this expectation. In conjunction with incorporating tactical nuclear weapons, the Army requested to test out its newly formed Sky Cavalry during the exercise. General Weyland, the maneuver director, denied the request. Sky Cavalry consisted of an organic reconnaissance and surveillance element operating day or night over the entire battlefield, a heavily armed blocking force that could be airlifted quickly, a combined artillery and antitank force, and an aviation platoon.[94] Weyland felt the use of these assets violated the 1952 Pace-Finletter roles-and-mission agreement between the Air Force and Army.[95] The Army appealed to the Secretary of the Army who convinced the Secretary of the Air Force to reverse the decision.

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92 Schlight, *Help From Above*, 241.
93 Schlight, *Help From Above*, 241.
94 James W. Williams, *A History of Army Aviation: From Its Beginning to the War on Terror* (Lincoln, Nebraska: iUniverse, 2005), 71.
95 Schlight, *Help From Above*, 209.

The early rejection of the Army's request by General Weyland emboldened the conflict that had developed between the Air Force and Army and persisted throughout the exercise. The Sky Calvary was devised based on up-and-coming helicopter technologies and lessons learned from Korea, specifically the lack of responsiveness from Air Force assets. Enthusiasm behind the Sky Calvary persisted with TAC evolving into a nuclear-centric force. Major General Paul Adams, XVIII Airborne Corps commander, faulted the Air Force for not supporting the needs of the Army, specifically CAS, because of its affinity for nuclear weapons.[96] The budget ceilings and rapid improvements in weapons technologies presented a crisis for the Air Force, affecting internal organizations specifically. As previously mentioned, TAC was attempting to develop a stake in the Air Force's most-dangerous scenario, where TAC air forces would provide nuclear interdiction of Soviet lines of communication while strategic bombers were striking the Soviet military industry. TAC was sensitive to the fact that it was consistently targeted for the brunt of budget cuts. Now the Army was challenging TAC's purpose, and the perceived infringement by the Army on its role reinforced the notion of TAC being a dispensable command. For TAC the exercise served as a venue to demonstrate its strategic purpose.

The place of contention between the role TAC was attempting to preserve and where the Sky Calvary wanted to operate was typically in the combat zone where CAS occurred. As both Services attempted to push boundaries against one another, there was a need to compromise on each other's area of operation. Therefore, in an effort to reduce tensions and establish a joint perspective on CAS, TAC and CONARC each proposed a definition of CAS. TAC defined close air support operations as, "those assisting [not supporting] surface forces in the immediate battle area, which it defined as the area, not to exceed 25 miles, between the friendly surface forces and the bomb line."[97] For the Army CAS was "visual, photographic, and electronic reconnaissance by tactical support planes as well as the destruction of enemy forces as required by the ground force commander to support [not assist]-) his mission."[98] The Air Force definition, claiming

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96 Williams, *A History of Army Aviation*, 72.
97 Schlight, *Help From Above*, 211.
98 Schlight, *Help From Above*, 211.

assisting versus support, places the initial responsibility on the ground force to manage its own firepower and request CAS only in the event the Army failed to defend itself. The 25 miles represented the distance most artillery or organic firepower could reach. With the intent of securing its role in its most-dangerous scenario, the Air Force agreed that "close air support should not be requested for targets which are within the means and capabilities of organic ground weapons unless the added firepower delivered by aircraft will produce decisive results."[99] Under other conditions this might have led to conflict, however, both organizations benefited from the definition. Throughout the SAGE BRUSH exercise this definition afforded the Air Force the opportunity to practice nuclear deliveries in an interdiction role and for the Army to test its Sky Cavalry. Unfortunately, a grey area emerged on the battlefield, and the CAS mission suffered from the divergent focus of both Services, even though cooperation occurred.

Exercise SAGE BRUSH was just the beginning of a dedicated effort for TAC to become proficient in nuclear employment. TAC began to dedicate nearly all of its training to nuclear deliveries. In 1958, when TAC sent a CASF task force to support Lebanon and Taiwan, it became evident conventional weapons delivery skills had deteriorated. During this conflict, national policy precluded the use of nuclear weapons, and evidence the pilots were not properly trained to conduct conventional attacks was glaring. The years of focus on nuclear delivery had eroded the skills necessary for conventional delivery. A task force commander commented, "U.S. forces would have been overwhelmed in conventional fighting," implying TAC assets could not provide support to ground forces in a conventional conflict.[100] Rooted in the implemental mindset and focused on its most-dangerous scenario, the Air Force chose not to alter course on account of the incidents. Instead, the Air Force responded that the strategic nuclear force must be made stronger to be more effective in deterring the limited and local wars. This thinking led to a reduction in TAC, cutting the development of conventional weapons and a decline the training in non-nuclear events to only two F-104 squadrons. The Air Force did not keep the conventional stockpiles up and was forced to rely on the Navy's conventional program. Upon leaving TAC, General Weyland

[99] Schlight, *Help From Above,* 216.
[100] Schlight, *Help From Above,* 184.

remarked, "preoccupation with strategic bombing and missiles would leave us unprepared to fight limited war."[101] These decisions heightened the Army's fear of entering a fight without dedicated air support. They also reduced the amount of training and contact with the Army, since the weapons were becoming incompatible with ground maneuvers. In the early 1960s the Air Force and Army were operating jointly within Strike Command, however, the joint relationship stayed within the confines of the headquarters. After the Air Force and Army were asked to test the air mobility and tactical air concepts, the two Services had to be forced to conduct joint exercises by Secretary McNamara. Strike Command established the Joint Test and Evaluation Task Force (JTETF). After several unilateral preparatory exercises were conducted, the first joint exercise for JTETF was GOLD FIRE I. Believing in the need for its Army air mobility program, the remaining planned joint fire exercise GOLD FIRE II was cancelled, and the Army moved out on a unilateral exercise, AIR ASSAULT II.[102] Across the chasm the Army became more diligent about building organic forces, which would constitute a source of conflict with the Air Force for years to come.

Platforms

Since gaining independence from the Army, the Air Force has relied on advanced weapons systems to secure its purpose and role in national defense. Following the Korean War, there were significant advancements in jet power, miniaturization, and missile technology. Not only did these innovations seamlessly fit into what the Air Force perceived was required to combat its most-dangerous scenario, but they provided the perfect response to many crises that arose throughout this period. The Air Force saw future conflict through a purely nuclear lens, and measured each success or failure by the delta between the opponent's stockpile and its own.

Throughout the period between Korea and Vietnam, the Air Force received over 40% of the total defense budget. SAC had doubled the number of aircraft it had in its inventory within two years of receiving the rearmament funding.[103] Relative to the other

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101 Schlight, *Help From Above*, 185.
102 Schlight, *Help From Above,* 371.
103 Millet and Maslowski, *For the Common Defense*, 494.

Services the Air Force was by no means operating under austere fiscal limits; for example, the Army received only 23% of the defense budget. Nonetheless, the Eisenhower administration's fixed budget ceilings and yearly reduction in the Air Force wing-program placed limits on what the Air Force could pursue. According to its most-dangerous scenario, the Air Force required a significant number of weapon systems to target the rapidly expanding Soviet military industrial complex. To add to this, it seemed the Soviets were demonstrating technological leaps bi-annually, ratcheting up the Air Force's nuclear-response requirements.

The appearance of the Soviet's Mia-4 Bison bombers and anticipation of the Tu-95 Bear bombers was one of the first instances to spark controversy by creating the perception of a bomber gap. To make up for this perceived gap and eager to create pressure for higher production numbers of B-52s, the Air Force immediately concluded that if the Soviets were willing to display 28 Bison aircraft, they must have twice that many in service. The CIA discovered, however, that the display of aircraft during Aviation Day was the total number of bombers the Soviets had, and that the Soviets were producing far fewer Bison and Bear aircraft than comparable airframes by the United States. This revelation was rejected by the Air Force's implemental mindset; evident in a Senate Armed Services Committee hearing where General Twining gave testimony claiming the Soviets would soon have thousands more aircraft than the United States.[104] In that same meeting LeMay claimed that "unless appropriations for B-52s, then coming off the lines at six aircraft a month, were increased, the Soviet Union would achieve air superiority over the United States. By 1960, the Soviet Air Force will have substantially more Bisons and Bears than we will have B-52s…I can only conclude then that they will have a greater striking power than we will have."[105] General Thomas D. White, Air Force Vice Chief of Staff, told the Senate, "the Soviet Union was not only making scientific and technological advances at a faster rate than the United States, but also beating us at our own game – production."[106] Some believed the Soviet Air Force would be capable of "world superiority" if the United States did not intensify its aircraft

[104] Watson, Jr., *The Office of the Secretary of the Air Force*, 155.
[105] Sheehan, *A Fiery Peace in a Cold War*, 151.
[106] Watson, Jr., *The Office of the Secretary of the Air Force*, 155.

production of bombers and weapons for its nuclear stockpile.[107] The rhetoric was effective and Congress provided an additional $1 billion to the Air Force budget for 1956 and 1957.[108] "By 1957, SAC had 137 B-36s, 1,285 B-47 medium jet bombers, 250 B-52s with more to come, and hundreds of the KC-97s tankers."[109] By the next year, it was confirmed the Soviets only had 85 bombers and SAC had 1,769.[110]

This intelligence did not dissuade the Air Force from seeking to become technologically and numerically superior to the Soviet Air Force. Well before the Soviets displayed their strategic capabilities, from bombers to intercontinental ballistic missiles, the Air Force was seeking to attain longer-range, faster, and more destructive weapon systems. The first droppable hydrogen bomb weighed 42,000lbs meaning the B-36 was the only bomber that could carry it in 1954. By 1955 the weight of the bomb had been reduced to 17,000lbs. With this new weapon, LeMay asked for more B-52s increasing the request to 1,440 bombers.[111]

Along with payload improvements, enhanced jet engines enabled aircraft to carry heavier payloads higher and faster than ever before."[112] By mid-1957, nearly all of the Air Force's combat wings were equipped with jet aircraft. When advances in technology resulted in the reduction in weight and size of nuclear warheads, making it possible for them to be carried by tactical aircraft, TAC capitalized on this capability. The beginning of this endeavor occurred as early as 1951, when the Air Force had equipped the F-84G fighter-bomber with a nuclear weapon in hopes of expending it in the Korean War.[113] To the Air Force's frustration, political leadership restricted the use of nuclear weapons in Korea to prevent escalation with the Soviet Union. Believing their use would have led to earlier capitulation, the Air Force pulled the lesson that having tactical nuclear capability was a prerequisite for future conflicts. General Twining took the experiences in Korea as an example of where future warfare would be heading and made it a point throughout the

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[107] Watson, Jr., *The Office of the Secretary of the Air Force*, 159.
[108] Sheehan, *A Fiery Peace in a Cold War*, 151.
[109] Neil Sheehan, *A Fiery Peace in a Cold War: Bernard Schriever and the Ultimate Weapon* (New York, New York: Vintage Books, 2009), 141.
[110] Sheehan, *A Fiery Peace in a Cold War*, 151.
[111] Sheehan, *A Fiery Peace in a Cold War*, 145.
[112] Converse III, *Rearming the Cold War 1945-1960, Volume I*, 1: 461.
[113] Converse III, *Rearming the Cold War 1945-1960,* 1: 460.

1950s to arm all TAC fighters and bombers with nuclear weapons. Another reason for maximizing the tactical fleet's ability to carry nuclear weapons was to offset the imbalances in both manpower and machines presented by the Soviets in Europe.

Operating under the assumption that if war were to come, the assets that were in place would be the only ones available for the fight, TAC was determined to exploit each aircraft's capacity. The air wings that preserved conventional platforms, supporting Army forces, became subordinate to the primary strike force.[114] For the three years following the Korean War, between January 1953 and August 1956, the Air Force acquired the B-57 light bomber, F-100 day fighter, F-101 strategic fighter, and F-104 lightweight day fighter, all capable of carrying nuclear weapons.[115] The overzealous pursuit of nuclear capabilities in 1955 drove a few tactical force commanders to request the building of a lightweight jet fighter for local wars. General Twining responded saying, "Under limited dollar and force structure, our concept must insist that tactical air power be dedicated to delivery capabilities optimized for nuclear weapons."[116] The threat of losing a piece of the fiscal pie drove an all-or-nothing mentality, where nuclear capability was the baseline requisite for procurement. This was compounded by the Air Staff report, which acknowledged the ability to cut platforms due to the increased performance of thermonuclear weapons. The report targeted TAC aircraft and determined "substantial cuts could be made to the medium troop carrier wings designed for service in theater operations, since many Army units were to be returned to a strategic reserve."[117] The loophole was that the recommendations targeted assets not related to carrying nuclear bombs. As TAC built up its nuclear force, the Air Force began to reallocate SAC platforms to TAC, to work around the limitations set by the budget and reductions in the wing-program structure. This helped reinforce TAC's new nuclear focus, widen the distance between TAC and the Army, and bolster its role in the most-dangerous scenario.

The qualities of the aircraft that were procured and developed throughout the

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[114] Schlight, *Help From Above,* 183.
[115] George M. Watson, Jr., *The Office of the Secretary of the Air Force 1947-1965* (Washington, D.C.: Center For Air Force History, 1993), 147.
[116] Converse III, *Rearming the Cold War 1945-1960,* 1: 460.
[117] Futrell, *Ideas, Concepts, Doctrine*, 425-426.

interwar years moved further and further from those the Army consistently asked for in a CAS-dedicated platform. The famous "Century Series" fighters were developed throughout the 1950s—the North American F–100 Super Sabre, the McDonnell F–101 Voodoo, the Convair F–102 Delta Dagger, the Lockheed F–104 Starfighter, the Republic F–105 Thunderchief, and the Convair F–106 Delta Dart were all supersonic. Performance specifications called for two new systems, the North American's XF–108 Rapier long-range interceptor, as well as the company's XB–70 Valkyrie strategic bomber. The B-70, intended to be the successor to the B-52, and built to fly high (75,000 feet) and fast (Mach 3.2), cost $9.2 billion for two prototypes.[118] The F-105, with all-weather attack capabilities, was put into large-scale production to replace some of the aging aircraft, the F-84s, B-57s, B-66s, and F-100s.[119] Notably, it was designed as a very fast nuclear-capable fighter-bomber with low loiter time, configured to carry only one crewmember, with no back-up hydraulic system. The F-105 Thunderchief was expected to carry 1.5 times the weight of the B-17 World War II heavy bomber, to include nuclear weapons and had over 1,000 rounds of ammunition for its 20-mm gun.[120] These characteristics made it questionable at best in a CAS role. Even with advances in missile technology and increased weapons effects, there was still an effort to construct the next generation of nuclear-capable strategic and tactical aircraft, and in vast numbers. Platforms designed specifically for ground support with long-loiter time, austere airfield capability, night and all-weather attack capability, and a variety of air-to-surface armament were deemed expendable, especially if they did not have nuclear capabilities.

Regrettably, although for the past five years the Air Force had spent money procuring the Century Series jet interceptors to counter Soviet bombers en route to the continental United States, they now appeared obsolete for their original purpose. The other Services would not take the platforms because they had design flaws making them inappropriate for other missions as well. The F-100Ds experienced difficulty dropping even conventional weapons. The F-104, originally designed for bomber escort, flew too fast, at Mach 2, for most services to adopt it. Instead it was offered up in foreign arms

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[118] Sheehan, *A Fiery Peace in a Cold War*, 170.
[119] Futrell, *Ideas, Concepts, Doctrine*, 527.
[120] Schlight, *Help From Above,* 188.

sales. Responding to Soviet technical advances, the Air Force was forced to redefine these systems as multi-role, fighter-bombers. With this new designation, they could be shifted to populate the tactical air forces. Although they were ill-suited for CAS missions, since the popular belief in the Air Force was that local aggression would end in general war, CAS would be rare. Undeterred by the comments from the Army, the Air Force felt these fighter aircraft were sufficient for ground support. In 1955, the Secretary of the Army distributed an article, *Army Aviation*, to describe the list of deficiencies in Air Force close air support.[121]

Army leaders understood the Air Force desire for multi-role platforms, and that was precisely why they discouraged them for CAS aircraft. The Army continued to press for "a dedicated, light, subsonic, close air support plane that could operate from forward fields and could be controlled by ground commanders at lower levels."[122] The idea that an aircraft could perform various missions meant the CAS mission, seen as a last resort or even a minimal possibility, would receive the last priority. General Taylor, Army Chief of Staff stated, "The high performance Air Force planes are flying away from us: they have left the battlefield."[123] Noting the direction tactical aviation was going in the Air Force and its own increasing requirement for mobility and firepower, the Army began to up its effort to develop aircraft capable of meeting its airlift and assault needs. The Army's Sky Calvary, mentioned above, was created in 1955 to meet exactly these needs.

The Army felt that over reliance on nuclear capabilities under the New Look policy was driving the Air Force to abandon CAS all together. The Army attempted to modify the degree of control it had on the development and procurement of Air Force planes. The Army's response to its most dangerous scenario, a deterrent force and flexible response to Soviet aggression, required rapid mobility and on-call firepower. Failure to make progress on influencing aircraft development to support these requirements resulted in the Army taking initiative to build its own. The aircraft debate was foundational in the roles-and-missions debates that fulminated for over seven years, from the introduction of the Sky Cavalry at exercise SAGE BRUSH to the results of the

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[121] Schlight, *Help From Above,* 192.
[122] Schlight, *Help From Above,* 188.
[123] Schlight, *Help From Above,* 190.

Howze and Disosway Boards.

The Air Force was habitually skeptical of the Army's actions, holding the perception that the Army was seeking to gain its own autonomous air force. With the Army's pursuit of the Sky Calvary, and the arrival of rocket technology, efforts were made by the Air Force to limit the Army's aircraft procurement as well as restrict the range of its missiles. In November 1956, in an attempt to reduce the inter-service conflict between the Air Force and Army, Secretary Wilson was forced to step in. He formally requested the Army reexamine its air-support needs to determine where organic Army assets should end and Air Force support would begin. Secretary Wilson signed DOD Directive 5160.22, which replaced the Pace-Finletter MOU. "It established weight limitations [for the Army] at 5,000 pounds empty for fixed-wing aircraft, convertiplanes, and vertical/short takeoff and landing aircraft, and 20,000 pounds empty weight for rotary wing aircraft."[124] The directive also restricted the Army from providing aircraft that could perform "strategic and tactical airlift, tactical reconnaissance, interdiction of the battlefield, and close air support."[125] Mutual agreement with the directive implies Service cooperation, however, it is critical to point out it was not necessarily cooperation but conflict-reduction instead. Without outside pressure from Secretary Wilson the two Services, mentally shrouded in the implemental mindset, required an outside force to break through their adversarial relationship.

External influence from the newly appointed Secretary of Defense, Robert McNamara would also be essential in the early 1960s in compelling the Services to cooperate, albeit through compromise. The Army, in response to requests from Secretary McNamara when he entered office, set out to institutionalize its air-mobility concept. Over the course of four months McNamara charged an Army-centric board led by Lt Gen Hamilton Howze to "evaluate new concepts of battlefield mobility in terms of cost-

[124] Alfred Goldberg and Lt Col Donald Smith, *Army-Air Force Relations: The Close Air Support Issue*, United States Air Force Project RAND (Santa Monica, California: RAND, October 1971), 14.
[125] Goldberg and Lt Col Donald Smith, *Army-Air Force Relations*, 14.

effectiveness and transport-effectiveness."[126] The results of the Howze Board incited the Air Force. Between 1955 and 1959, the Army had increased its inventory of air vehicles from 3,495 to 5,472.[127] The continual rise in Army aviation, and the recommendations from the Howze Board to create a distinct air mobility system, infringed on the Air Force's role. The Howze Board recommended the "formation of several types of new aviation and airmobile units and a five-year program to increase ground strength to eleven Reorganization Objective Army Divisions (ROAD) and five air-assault divisions."[128] In response, the Air Force conducted its own report let by Lt General Gabriel P. Disosway. The Air Force disparaged the Howze Board report, questioning the Army's methodology and claiming it did not take into consideration tactical assets provided by the Air Force.[129] These two reports were presented to Secretary McNamara shortly before support to Vietnam began to increase. The main element of friction that came from the reports was a "contention that the Air Force was fully willing and able to support the Army and the Army's attempt to develop its own aerial support resources were both economically and doctrinally unsound."[130] Secretary McNamara issued the need for a joint Close Air Support Board. The Air Force and Army were unable to agree on various CAS topics and split the Board into an Air Force CAS Board and a separate Army CAS Board. This is evidence of how poor the relationship between the Air Force and Army had become by the early 1960s.

The Chairman of the Joint Chiefs of Staff attempted to weigh in on the debate between the Air Force and Army regarding Army aviation, what the Air Force viewed as a roles-and-missions issue. He proposed the Army procure air assets based on function rather than weight. In 1963, Air Force Chief of Staff, General LeMay proposed, "the Air Force take over all aerial vehicles presently owned and operated by the Army and provide all of the Army's air support now and in the future."[131] As expected the Army Chief of

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126 Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force 1961-1984*, vol. II, II vols. (Maxwell Air Force Base, AL: Air University Press, 1989), 180.
127 Goldberg and Smith, *Army-Air Force Relations*, 16.
128 Goldberg and Smith, *Army-Air Force Relations*, 20-21.
129 Schlight, *Help From Above*, 260.
130 Schlight, *Help From Above*, 260.
131 Goldberg and Smith, *Army-Air Force Relations*, 26.

Staff rejected this proposal. Then again in 1965, Secretary of the Air Force Zuckert recommended all combat fixed-wing and cargo-coded rotary-wing resources in direct support of the Army should be handed over to the Air Force to operate. Before the two Services were able to come to a resolution, the Army's airmobile division was made combat-ready for its deployment to Southeast Asia. The Air Force and Army entered the war with a fractured relationship, skeptical of one another's intentions and motivations. The platforms pursued by each Service, whether it was TAC's nuclear-capable jet fighters, or the Army's armed helicopters, were the root source of the distrust.

Summary

The years between Korea and Vietnam presented the Air Force and Army with a decade to hone the air-to-ground lessons initiated in WWII and developed in Korea. Unfortunately, this was not the case. National policy assisted the Air Force in validating its most-dangerous scenario as the only war of the future. The Army, on the other hand, seeking a credible mission, considered other ways in which the war of the future would manifest itself. Inherently, with different visions, both Services began to drift away from cooperating with one another, especially in CAS. The budget ceiling, technological advancements of the Soviet Union, and the change in the administration initiated crises within the organizations driving each one conceptually deeper into its most-dangerous scenario. With every new crisis, it became imperative for each service to secure the role necessary to confront its vision of the future. TAC gravitated toward the organizations' most-dangerous scenario to secure relevance, and the Army attempted to create replacement forces to hedge against lost support. These actions affected organizational interaction, training opportunities, and platform acquisition. The few times the Services demonstrated cooperation during this period resulted from outside influence or direction. The figure exerting influence had to hold a position of authority in order to create organizational structures or dictate cooperation. Without the Services being forced to test and evaluate joint CAS capabilities before the start of major operations in Vietnam, they would have preserved none of the institutional joint CAS knowledge reacquired in Korea. Unfortunately, a decade spent reducing inter-service friction and conflict resulted in the unnecessary loss of national treasure and an intense effort to regain the detailed

integration needed for successful CAS missions.

CAS in the Vietnam War

Similar to the Korean War, the war in Vietnam can be broken down into phases. From 1961 through 1965, the United States supplied advisors, both air and ground, to assist the South Vietnamese in thwarting North Vietnamese aggression. President Kennedy believed, "the war could be won only as long as it remained Vietnam's war."[132] Nearly a year after Kennedy's assassination, on December 27, 1964 the North Vietnamese forces staged a major offensive against a town just 40 miles southeast of Saigon, Binh Gia. The 33d Ranger and 4th Marine battalions were virtually wiped out as well as the armor and mechanized relief units that were sent in to offer support.[133] This event was followed closely with an attack on the United States' airbase at Pleiku. After several years of attempting to stifle North Vietnam's efforts to topple the Saigon government and spread communism throughout Indochina through small advisory actions, President Lyndon B. Johnson upped the ante by sending in Air Force bombers and thousands of conventional ground forces, kicking off the major war effort. By 1965, the United States had entered the second phase of the war. United States ground presence had risen from 23,000 advisors to over 184,000 troops by the end of the year. In December 1965, "the Air Force had over 500 aircraft and 21,000 men spread out over 8 bases."[134] Before the end of the following year United States strength grew to 400,000.[135] The third and final phase of the war was President Nixon's strategy of Vietnamization and reduction of American forces.

During the second phase, the war itself fragmented into three distinct characters. The fighting in North Vietnam was conducted primarily by the Air Force, initially called Operation Rolling Thunder, and was an attempt to carry out strategic bombing, targeting North Vietnamese air forces and the limited industrial war-making capacity. In South

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[132] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 258.
[133] Lt. Col Ralph A. Rowley, *The Air Force in Southeast Asia: Tactics and Techniques of Close Air Support, 1961-1973* (Washington, D.C.: Office of Air Force History, February 1976), 53.
[134] Rowley, *The Air Force in Southeast Asia*, 54.
[135] Rowley, *The Air Force in Southeast Asia*, 55.

Vietnam, the Army and Marines faced an intense counterinsurgency fight against the Viet Cong. Finally, the Air Force and South Vietnamese armed forces were tap-dancing around political sensitivities and geographic obstacles to disrupt and halt enemy lines of communication through Laos and Cambodia. The patchy make-up of the battlefield reflected the Services' desire to fight the war they individually desired. Vietnam became the testing ground for the Services to prove their way of warfare, and this led to fragmented operations and complicated command and control structures.

One saving grace for air-to-ground operations was the slow lead-in to major ground operations. The experience acquired in the first phase of the war gave the Air Force and Army an opportunity to refine the Tactical Air Operations Control procedures prior to the enormous influx of United States air and ground forces. Between 1961 and 1965 the Services were able to reduce immediate CAS request response time from an average of 90 minutes to 40 minutes.[136] Lessons from the advisory period also prepped the opening salvos of major combat by highlighting the need to rely heavily on airborne Forward Air Controllers (FACs) to control CAS missions. Unfortunately, during the interwar years, the focus on supersonic, nuclear-armed tactical aircraft led TAC to deplete its inventory of FAC-capable aircraft. Although FAC target spotters were deemed vital in Korea, platforms suited for this mission were not retained under budget pressures. In the years leading up to major United States involvement, the Air Force could reach back to borrow 25 L-19 light observation aircraft from the Army to serve in the FAC role.[137] The Army had also obtained 22 total O-1s (Cessna 305As) to use in Vietnam in 1963, but the Air Force had to request them back from the Army, where they had been transferred following the Korean War. Airborne FACs proved crucial in overcoming the heavy foliage and obscure nature of guerilla warfare, where there were no distinct lines between friendly and enemy forces. The FAC "marked the location of friendly forces, civilians, and enemy targets."[138]

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136 Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 301.
137 Thomas Garrett, "Close Air Support: Which Way Do We Go?," *Parameters* XX (December 1990): 31.
138 John J. Sbrega, "Southeast Asia," in *Case Studies in the Development of Close Air Support*, ed. Benjamin Franklin Cooling (Washington, D.C.: Office of Air Force History, 1990), 435.

The FAC became a vital communications link between the aircraft conducting CAS missions and the ground forces. A report from the House Armed Services Subcommittee on Tactical Air Support written in 1966 stated, "In the earlier days of the war in Vietnam our close air support was frequently ineffective and primitive."[139] Those are rather scathing remarks given the Air Force (Army Air Cops) had been participating in the CAS mission for over 48 years, since the end of WWI. According to the Congressional report, it wasn't until forces were in country for over a year and a half that higher authorities learned that Air Force and Army communications were incompatible.[140] One of the most crucial requirements for providing effective CAS is detailed integration, but without proper communication between the air and ground forces, this was impossible. Aircraft arriving on station were held to wait for the artillery to stop firing before entering the airspace to attack.[141] Across a decade of interwar years and throughout multiple joint exercises, it would seem absurd that the aircraft and ground forces did not have the proper equipment to communicate with one another and coordinate fires.

As the war escalated with the arrival of more ground forces, it became evident there was a need for more FACs and more CAS. From January to December 1965, the number of CAS missions had risen from 2,392 to an average of 15,000 missions a month.[142] This demand for fire support carried with it the inter-service rivalry over the Army's aviation pursuits. In 1966, in an effort to prevent the dispute from spiraling out of control, Chief of Staffs of the Air Force and Army signed the McConnell-Johnson Agreement, in which the Air Force "accepted the Army's right to operate helicopters in a fire-support role."[143] The unintended consequence of this agreement was to sanction two air forces for the CAS mission, the Army's armed helicopters and the Air Force's fixed-

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[139] Otis G. Pike, *Close Air Support: Report of Special Subcommittee on Tactical Air Support* (Washington, D.C.: Committee on Armed Services House of Representatives, February 1, 1966), 4861.
[140] Pike, *Close Air Support: Report of Special Subcommittee on Tactical Air Support*, 4862.
[141] Shawn P. Callahan, *Close Air Support and the Battle for Khe Sanh* (Department of the Navy, Marine Corps, History Division, 2009), 17.
[142] Callahan, *Close Air Support and the Battle for Khe Sanh*, 17.
[143] Dan Horwood, *Interservice Rivalry and Airpower in the Vietnam War* (Fort Leavenworth, Kansas: Combat Studies Institute Press, 2009), 123.

wing aircraft. Some sources estimate, "Air Force tactical aviation was called in to support only 10 percent of ground battles in South Vietnam."[144] This was a result of responsiveness, where armed helicopters could be on scene in less than 15 minutes, and the perceived ineffectiveness of Air Force jet aircraft ability in the CAS mission.

Reports chronicled the latter. The F-15 procurement report notes, "Office of the Secretary of Defense interest in acquiring new fighters did not appear until it became clear that the existing USAF aircraft being used to provide close air support for South Vietnamese troops were obsolete and dangerous. For example, in March and April 1964 two Air Force T-28 close air support aircraft crashed when their wings sheared off during bomb runs."[145] These aircraft failures forced commanders to request $50 million for modernizing the strike and reconnaissance fleet. The Century Series aircraft struggled to provide desired loiter times and were too fast for accurate target identification. Reports from the field led the Subcommittee on Tactical Air Support to question the Air Force on the type of aircraft provided for the CAS mission. It was unanimous from the interviewees that the A-1 was the best CAS platform in country at the time. "So effective was the performance of this aircraft that the Air Force briefly considered reopening the A-1 production line."[146] The members of the committee found, "it interesting…not only has the Air Force had to get spotter planes which it needs from the Army; it has had to get its attack planes (A-1s) from the Navy, and at the present time it is not producing any planes having the same capabilities for attacking ground targets at night that the Navy's all-weather A-6A has."[147] The Air Force, unwillingly, had to seek alternatives to its high-performance jets. A December 1967 JCS study revealed "propeller-driven craft to be nine times as effective as jet aircraft per sortie in killing trucks and watercraft, but proponents of jet aircraft did not view this as conclusive."[148] The Air Force was allocated $10 million to modernize its attack fleet, and it was suggested that a CAS-dedicated platform be designed.

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144 Mrozek, *Air Power and the Ground War in Vietnam: Ideas and Actions*, 118.
145 Jacob Neufeld, *The F-15 Eagle: Origins and Development 1964-1972* (Washington, D.C.: Office of Air Force History, November 1974), 10.
146 Sbrega, "Southeast Asia.", 441.
147 Pike, *Close Air Support: Report of Special Subcommittee on Tactical Air Support*, 4864.
148 Mrozek, *Air Power and the Ground War in Vietnam: Ideas and Actions*, 129.

While considering the recommendation to design a CAS-specific aircraft, the Air Force set out to modify existing platforms to accommodate the wartime demands. The T-37 trainer was converted into an attack platform, and the C-47 transport aircraft was modified to the AC-47, call sign "Spooky," providing day and night fire support. The AC-47 "carried its own flares and 3 SUU-11A mini-guns on the left fuselage. Each could fire 6000 rounds per minute."[149] The gunship arrived in late 1965 and in one 90-day period the following year it "claimed to have broken up 166 enemy night attacks."[150] Success from the gunships led the Air Force to continue to modify transport aircraft resulting in the AC-119G/K and AC-130. Interestingly, despite the success of the gunships in supporting the ground forces, the Air Force shifted their responsibility to interdicting Viet Cong supply lines. In addition to the gunships, the Air Force deployed its premier B-52 bomber to participate in CAS missions as well, but it was also diverted to interdiction missions. The Army, well aware of the allocation of Air Force assets and its increasing dependence on its armed helicopter force, moved out in developing a robust armed platform, the CH-47 Cheyenne.

The complex character of the Vietnam War, conducted in three phases and executed on three distinct battlefields, makes it difficult to truly assess the effects interwar conflict had on the CAS mission. Given that the Air Force and Army were both aggressively seeking to prove themselves relevant to the limited-war-focused administration, the Services saturated the battlefield with firepower. In the battles of Ia Drang and Khe Sanh, ground forces lauded the Air Force's support and attribute their victory to the support they received. At Khe Sanh, there was a 78-day siege where roughly 6,000 Marines and South Vietnamese were being attacked by nearly 20,000 enemy troops. "By the time the siege was broken, tactical aircraft flew almost 25,000 sorties and expended more than 95,000 tons of ordnance."[151] If success could be measured on the tonnage expended in country, it would appear the Air Force and Army contributed enormously to achieving the political aim. Unfortunately, success was elusive, and the efforts by the Air Force and Army to develop and control separate air

[149] Sbrega, "Southeast Asia.", 444.
[150] Ibid., 444.
[151] Ibid., 452.

forces depleted national resources, while at the same time masking the need for a revised joint strategy. It is uncertain what the outcome of the war might have been, but the energy expended in competition leading up to the war and throughout its duration only detracted from efficiency and effectiveness.

Chapter 6

From Jungle Mist to Desert Storm, 1973 - 1991

We have sought to deal with the world as it is, not as we might wish it to be.

- Ronald Reagan

Introduction

This chapter is the third case study to test the theoretical framework against an interwar period, Vietnam through the start of Desert Storm. Similar to the previous chapters, this one will begin by taking a brief survey of the national security policies and global events throughout this period. The Soviet Union and the perceived intent to spread communism for worldwide domination continue to be the United States' most dangerous threat. Despite this, during the nearly two decades of interwar years, a myriad of events altered the dynamic relationship between the United States and the Soviet Union. The ebb and flow of interactions and events framed how both political and military leaders assessed the threat. There is no denying that the psychological and physical experience of Vietnam affected the Services, shaking them loose from their implemental mindsets and previously established most-dangerous scenarios.

The world had entered a period of transition as well. Small and medium powers began to realize the two superpowers did not hold total influence and power over all other nations; and, therefore, they felt less retrained from seeking interests locally and regionally. In this environment the Services were each given fresh eyes to view the opponent and the role nuclear weapons played in international affairs. Under this new context the Air Force and Army derived their most-dangerous scenarios and necessary responses.

From the survey of historical events and identification of the Services' most-dangerous scenarios the context is set for bounding how they would elect to respond to crises. The threat to basic values as well as the perception of uncertainty and need for urgency solicited a response. The response to these crises created conditions for both cooperation and conflict between the Air Force and Army. In the pre-Korea case study the Air Force and Army's most-dangerous scenarios overlapped allowing a common perspective to foster cooperation. In the pre-Vietnam case study, the diametrically

opposed visions of the future of war impeded cooperation, requiring external forces to facilitate it. This case study seeks to conduct the same analysis and identify how the most-dangerous scenario affected cooperation and the close-air-support mission prior to Desert Storm.

Strategic Landscape

History is not a collection of disparate events. It is a tapestry of interwoven episodes, connecting the end of one fragment to the beginning of another. Events that occurred during the Vietnam War were molded by the years preceding it and in turn set the foundation for the years following. The Vietnam War itself was not all encompassing, domestic and international affairs played out irrespective of the fighting. The focus of this chapter is on the interwar years between the Paris Peace Accords in 1973 and the beginning of Desert Storm in 1991. However, at times it will be pertinent to reach back into the nearly decade-long conflict to gain contextual understanding for certain decisions or actions.

The United States relationship to the Soviet Union had begun to shift prior to the conclusion of the Vietnam War. There was no doubt the Soviet Union and its aim for global domination by communist ideology continued to be viewed as the most dangerous threat to the United States. Persistent objectives of national security were to deter war with the Soviet Union, deter the aggressive spread of communism, and, if deterrence failed and conflict occurred, limit its escalation. By the 1960s, the strategic landscape had begun to change. The presence of two nuclear superpowers was incapable of stifling local and regional conflict. Political figures in the United States and Soviet Union were aware of the bubbling skirmishes, and both set out to devise national security strategies acknowledging the new environment.

Since the beginning of the Cold War, nuclear diplomacy rested on the portrayal of capable, credible, and effective military power to counter the most belligerent opponents. Deterrence rested on this foundation, and strong military forces supplied its scaffolding. Both the United States and Soviet Union had a stake in preserving the security apparatus that had emerged between them; however, cracks began to appear. The United States military forces were put to the test in Vietnam against an unassuming opponent. In the opening weeks of 1968, the third year of conventional operations in Vietnam, the North

Vietnamese and Viet Cong initiated the Tet Offensive using over 70,000 troops to attack thirty-six of the South Vietnam's forty-four provincial capitals.[1] The perception was that the Rolling Thunder campaign, using some of the United States' premier strategic assets and doctrine, had decimated the North's ground operations. Instead "the Tet Offensive shattered that conviction," calling into question the United States' military operations.[2] On the European continent, Alexander Dubcek launched the Czechoslovakian Prague Spring, calling for socialist reforms in the freedom of speech, freedom of the press, and a multiparty government. Feeling the a wave of democratization entering the Eastern Bloc and threatening the Warsaw Pact, the Soviet Union responded by a military invasion of Czechoslovakia in August 1968. President Leonid Brezhnev viewed this event as an affront to all socialist states and reaffirmed the international responsibility of the Communist Parties and socialist states to preserve their unity. He also claimed that, if the anti-socialist movement in Czechoslovakia had succeeded, "NATO troops would have been able to come up to the Soviet border, while the community of European socialist countries would have been split."[3] For both the United States and the Soviet Union, these events reinforced previous indicators that international transformation was happening. Each nation took a different approach to resolve this dissonance.

The United States had already come to realize it needed options to affect the various levels of aggression. In 1969 when President Richard Nixon entered office, he proposed a Strategy for Peace. Some of the objectives were to "turn arms competition into arms limitations" and to move from an "era of confrontation to an era of negotiation".[4] This fed into his national security strategy based on Realistic Deterrence. The new policy added a fresh element to deterrence—partnership. The intent was to outsource the burden of defense to other nations. It had become apparent the military

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[1] Mark Clodfelter, *The Limits of Airpower: The American Bombing of North Vietnam* (New York, New York: The Free Press, 1989), 112.
[2] Clodfelter, *The Limits of Airpower,* 112.
[3] Leonid Brezhnev, "Brezhnev Doctrine: Speech by First Secretary of The Soviet Union Leonid Brezhnev" (International Relations and Security Network, November 13, 1968), 2, accessed April 17, 2014, www.isn.ethz.ch.
[4] Melvin R. Laird, "National Security Strategy of Realistic Deterrence" (Secretary of Defense, February 17, 1972), 1, accessed April 16, 2014, http://history.defense.gov/resources/1973_DoD_AR.pdf.

alone was not sufficient to deter or counter international conflict, and there had to be a way to preserve United States military forces and avoid depleting valuable security resources. Shortly after his inauguration, Nixon gave a speech in Guam where he said, "The United States will participate in the defense and development of allies and friends, but that America cannot -- and will not -- undertake all the defense of the free nations of the world."[5] The political leadership believed it was time to restrain the United States from committing to defending the entire free world. Political leaders and the American public were exhausted from the war and were looking for ways to reduce reliance on military force internationally.

Carrying on the initial efforts of previous presidents, Nixon had proposed improving the relationship between the United States and the Soviet Union. For reasons beneficial to both nations, the Limited Test Ban Treaty (1963), Nuclear Non-Proliferation Treaty (1968), Strategic Arms Limitation Talks (SALT) (1969), and Antiballistic Missile Treaty (1972) were signed. A key reason the United States was willing to participate in these negotiations was because of the concept called "essential equivalence." It was made up of three elements: 1) the traditional second strike, 2) that a counterforce asymmetry is not perceived or does not actually exist, and 3) that there is a perceived nuclear equality between nations.[6] By seeking equivalence and instigating agreements, the nations could break free of the one-for-one arms race, potentially regulating each other's future acquisition of nuclear weapons. In reality, these efforts were not sincere, because after nearly 30 years in which the United States and Soviet Union had been antagonizing one another, they were just now getting comfortable under the stability of deterrence and did not want to take any drastic measures that would upset this balance. The concurrent national security strategies over the next seven years reflect this dance.

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[5] Laird, "National Security Strategy of Realistic Deterrence", 21.
[6] Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force 1961-1984*, vol. II, II vols. (Maxwell Air Force Base, AL: Air University Press, 1989), 348.

Following the Vietnam War Nixon reassessed the national strategy, once again looking for ways to have "selectivity and flexibility" in his response to conflict.[7] In February 1973, Nixon had "directed a review of existing U.S. nuclear policy in light of the changes in the strategic situation."[8] The report, submitted in June of that year, described the changes that had to be considered as the President moved forward with a national security strategy. The report documented, "In the 1950s and into the 1960s when the US had a preponderance of nuclear strength, the threat of large-scale retaliation against either military or population/industrial targets could be considered a credible deterrent to Soviet nuclear or conventional attacks anywhere in the world, but times have changed."[9] The report went on to reveal that, from the SALT I agreements forward, the Soviets had an equally effective strategic deterrent, lessening the credibility of the United States' intention to retaliate massively at the time and place of its choosing. It also exposed the deteriorating perception that NATO and other U.S. allies had in its deterrent strength and credibility. In January 1974, President Nixon signed National Security Decision Memorandum (NSDM) 242 to clarify the purpose of United States nuclear forces and the conditions for which they would be used. It remained that the "fundamental mission of U.S. nuclear forces was to deter nuclear war" and by doing so prevent nuclear attacks on United States territory and forces, deter nuclear or conventional attacks by nuclear nations, and inhibit coercion.[10] The document contained two parts if deterrence failed, planning for general war and planning for limited nuclear war. When planning for limited nuclear employment, the goal was to terminate the war

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[7] Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force 1961-1984*, vol. II, II vols. (Maxwell Air Force Base, AL: Air University Press, 1989), 346.
[8] Henry A. Kissinger, "National Security Study Memorandum 169" (National Secuirty Council, February 13, 1973), 1, accessed April 16, 2014, http://www.nixonlibrary.gov/virtuallibrary/documents/nssm/nssm_169.pdf.
[9] M. Todd Bennett, *Foreign Relations of the United States 1969-1976 Volume XXXV*, National Security Policy (Washington, D.C.: United States Government Printing Office, 2014), 53.
[10] Richard Nixon, "National Security Decision Memorandum 242" (National Security Council, January 17, 1974), 1-2, accessed April 14, 2014, http://www.fas.org/irp/offdocs/nsdm-nixon/nsdm_242.pdf.

as quickly as possible and "at the lowest level of conflict feasible."[11] It was still assumed that it was possible to combine nuclear and conventional weapons and control the escalation of the war. The inability to control escalation would result in general war, requiring the use of the strategic nuclear arsenal. As Secretary of Defense Donald Rumsfeld had provided the Joint Chiefs of Staff in April 1974, the national security policy was one of "assured destruction" plus "options" plus "essential equivalence".[12] This jambalaya of national security policy would continue throughout the administrations of Presidents Ford and Carter.

Toward the very end of Carter's time in office, Secretary of Defense Harold Brown coined the term "countervailing force." A few years earlier it was confirmed the Soviets had developed a hard-targeting kill capability, which was perceived to imply the Soviets were pursuing a nuclear war-fighting stance versus just a deterrent posture.[13] In the *Department of Defense Annual Report FY1981*, Secretary Brown outlined the countervailing strategy, describing it as having the "forces and plans for the use of our strategic nuclear forces such that in considering aggression against our interests, our adversary would recognize that no plausible outcome would represent a success—or any rational definition of success."[14] The two key elements of this strategy were assured destruction and flexible response.

They were not new concepts, but reestablished as the bedrock of deterrence. It remained imperative for the United States to have the capability to retaliate against Soviet aggression with all-out nuclear attack. But it was also crucial to have options to prevent limited aggression and Soviet adventurism. In the 1981 DOD Annual Report, Secretary Brown outlined the expanding role of conventional forces. This is in line with the one-and-a-half wars concept where the United States would have the force necessary to fight one major and one minor contingency. To achieve this, the United States would rely on both conventional and nuclear means that would remain flexible, control escalation, ensure survivability and endurance of strategic nuclear assets, and destroy Soviet nuclear

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[11] Nixon, "NSDM 242", 2.
[12] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 349.
[13] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 355.
[14] Harold Brown, *Department of Defense Annual Report Fiscal Year 1981* (Washington, D.C.: Secretary of Defense, January 29, 1980), 65.

and military forces, leadership, economic base, and reserve forces.[15] The Soviet threat was expanding, tripling the size of its forces in the Far East, without reducing the large forces stationed in Eastern Europe.[16] It was feared that as the Soviets modernized, the United States could "no longer preclude their being able to operate simultaneously in several different parts of the world…thanks largely to their assistance, lesser Communist powers such as North Korea, Vietnam, and Cuba--and some non-Communist ones such as Iraq--also had acquired relatively modern capabilities."[17] The objective, Secretary Brown stated: "we must be able to deter Soviet attacks of less than all-out scale by making it clear to the Kremlin that, after such an attack, we would not be forced to the stark choice of either making no effective military response or totally destroying the Soviet Union. We could instead attack, in a selective and measured way, a range of military, industrial, and political control targets, while retaining an assured destruction capacity in reserve."[18] The countervailing strategy was codified in Presidential Directive No. 59 in 1980.

When President Ronald Reagan entered office in January 1981, he brought with him a firm position on strengthening the United States military. His Secretary of Defense, Capsar W. Weinberger, believed the current national security policy was full of assumptions and devoid of substance. He wrote, "Wars break out over irreconcilable conflicts in vital interests. To cope with that situation requires a far more comprehensive doctrine, strategy, and policy. Neither mutual assured destruction nor essential equivalence is sufficient for this purpose."[19] Despite the criticism, the national security policy presented by the Reagan administration maintained many of the elements of PD-59. One change to the security policy was the "capability to sustain protracted nuclear conflict" versus an all-out concentrated nuclear exchange.[20] This fed into Reagan's belief

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15 Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 363.
16 Brown, *DoD Annual Report FY1981*, 7.
17 Brown, *DoD Annual Report FY1981*, 7.
18 Brown, *DoD Annual Report FY81*, 66.
19 Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 365.
20 Ronald Reagan, "National Security Decision Directive Number 32" (Executive Secretary, May 20, 1982), 5, accessed April 16, 2014, http://www.reagan.utexas.edu/archives/reference/Scanned%20NSDDS/NSDD32.pdf.

that there had to be a way to defend against a nuclear exchange, respond to the Soviet Union, and still have the upper hand in a nuclear war-fighting scenario. Reagan was motivated to reestablish United States supremacy. In the years of détente, many perceived the Soviet Union was taking advantage of a relaxed posture on the part of the United States.

The Soviet Union took a different approach to resolving the events playing out in the 1960s, which culminated during the Czechoslovakian invasion. Brezhnev saw "military power as the guarantor of Soviet influence and prestige."[21] He established three objectives for the Soviet defense policy: 1) maintain military strength sufficient to defeat the combined strength of any adversary, 2) dominate Eastern Europe by presence and intervention if necessary, and 3) encourage Third World revolution to build communism and weaken the West.[22] These stated goals were visible in the Soviet build-up of tactical forces and massive exports of Soviet military systems to nations around the world. A number of the incidents occurring in Third World countries and the Middle East were enabled more by Soviet military hardware than by Soviet ideology. It would be these assets the United States would be forced to contend with in the years to come.

The gravitational pull toward a more conventional flexible response and the various policies that sprung from it resulted from the recognition that the nuclear umbrella was not all-powerful. Previously held beliefs about the power of nuclear weapons used both strategically and tactically to deter all forms of war, were starting to dwindle. Global events contributed to a visible shift in how the Soviets were operating on the world stage. The pursuit of a strong nuclear deterrent was based on an imbalance of conventional forces, superior retaliation forces, and the uncertainty of Soviet intentions. Now, with improved conventional technology, nuclear parity, and a perceived offensive posture from the Soviets, the United States was compelled to truly contemplate fighting a non-nuclear war, if not against the Soviets, then against Soviet-made equipment.

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[21] Richard P. Hallion, *Storm Over Iraq: Air Power and the Gulf War* (Washington, D.C.: Smithsonian Institution Press, 1992), 67.
[22] Hallion, *Storm Over Iraq*, 67.

Although the primary contention between the United States and Soviet Union was ideological, the near democratization of Czechoslovakia and the delicate balance of forces in Europe reaffirmed the threat to its alliances. A commitment to NATO was foundational to United States foreign policy, and the appearance of a potential conventional battle in Europe reoriented political and military thinkers alike. Based on the nature of the their build-up and offensive posture, it appeared the Soviets were taking aggressive steps to arm themselves for a European contest. Coming out of the Vietnam War, the United States reoriented its military efforts toward supporting NATO. Small and medium-power nations, no longer content with being dormant or intimidated by the two superpowers and equipped with new Soviet technology, would garner the United States' attention throughout the interwar years.

The United States watched as brushfires and conflict continued to increase worldwide, unaffected by its efforts to restrain communism in Vietnam. In October 1973, the Yom Kippur War, a struggle between the Egyptians and Syrians against the Israelis, created uproars over the future of warfare. The use of surface-to-air defense systems, prioritization of targeting, Israel's failure to gain air superiority, and the appearance of technologically advanced weapons startled the United States and Soviet Union. In the first forty-eight hours of the war, the Israeli Air Force lost 40 aircraft, 14 percent of front-line combat strength.[23] At the conclusion of the war, Israel lost 4.1 percent of its total air forces, when just a few years earlier it had decimated Egypt, destroying half of the Egyptian air forces in little over 30 minutes.[24] The Yom Kippur War presented a startling picture: air superiority amid a concentrated, sophisticated, Russian-made air defense system would be difficult to acquire. The surface-to-air missiles (SAM) and associated systems posed serious problems for freedom of maneuver over enemy territory. The events of the Yom Kippur war quickly overshadowed the Vietnam War for many American military leaders. The entire range of "American and Soviet weapons and equipment, and of Soviet, German, and Israeli operational concepts

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[23] Stephen Budiansky, *Air Power: The Men, Machines, and Ideas That Revolutionized War, from Kitty Hawk to Gulf War II* (New York, New York: Penguin Group, 2004), 404.

[24] Hallion, *Storm Over Iraq*, 59.

of mechanized warfare" mesmerized the conventionally minded senior leaders.[25] This conflict appeared the epitome of future conflict, especially as the Vietnam experience continued to sour in the jar of memory.

Two years after the United States departed Southeast Asia, a humiliating climax to the Vietnam War was written when the North Vietnamese launched an offensive overthrowing the Saigon government, succeeding in unifying Vietnam under communist rule. Containment of communism was difficult, and this event reaffirmed how crucial it was for the United States to exert influence at the earliest opportunity as ideological and political shifts began to take place. In 1968, Brezhnev had restated Khrushchev's policy of the Soviet Union securing its interests in Third World countries. "The Arab World, from Morocco to the Persian Gulf, and South Asia, from Iran to India, represents the high-priority targets for Soviet diplomatic, economic, and military efforts."[26] The United States, avoiding large-scale military action, was also using diplomatic and covert operations to shape the international world in its favor.

The battle for international influence was being conducted in the Third World. Shortly after Vietnam was unified under communist rule, Angola was struggling to resist communist transformation. The Soviets went in to support their Cuban ally there, while the United States Congress restricted requests for providing covert support. Then in 1977, when Soviet client state Somalia attacked Ethiopia, the United States and Soviet Union were paired off behind two proxies. Again in April 1978, a Marxist coup overthrew the pro-American government in Afghanistan that ultimately led to the Soviet invasion in late 1979.[27] As Robert Futrell asserts, the invasion of Afghanistan was a departure from the previous invasions of Czechoslovakia and Hungary because those were considered Soviet satellite states, and Afghanistan was not under Soviet influence.[28]

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[25] Ingo Trauschweizer, *The Cold War U.S. Army: Building Deterrence for Limited War* (Lawrence, Kansas: University Press of Kansas, 2008), 195.
[26] Fritz Ermarth, *The Soviet Union in the Third World: Purpose in Search of Power* (Santa Monica, California: RAND, April 1969), 17, accessed April 18, 2014, http://www.dtic.mil/dtic/tr/fulltext/u2/687024.pdf.
[27] John Lewis Gaddis, *The Cold War: A New History* (New York, New York: Penguin Group, 2005), 208.
[28] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 460.

The tensions between the United States and Soviet Union had reached a climax, and it was apparent détente had failed.

The United States' international influence was declining as a series of communist successes began to accumulate. At the start of 1979 another revolution took place in the Middle East in Iran, where again the pro-American government was ousted. Later that year, the Nicaraguan dictator fell to Marxists Sandistas. Another significant humiliating event occurred in November 1979 when Iranian students seized the Tehran Embassy and took over fifty American hostages. With the Soviet invasion of Afghanistan following closely behind, "it seemed Washington was on the defensive everywhere, and Moscow was on a roll."[29] The display of influence, military capability, and modern weapons systems being distributed worldwide elevated NATO and Western Europe's fears of the United States' ability to deter and defeat Soviet aggression. The fortunes of the two superpowers, however, began to turn once again.

Entering into the 1980s, the Soviet Union was becoming bogged down in Afghanistan, but the global turmoil perceived to be caused by communist ideology and Soviet influence, did not subside. Following the Yom Kippur War in 1973, Syria had become one of the Soviet Union's primary arms customers among the various Arab states.[30] The weapons systems Syria had procured from Russia were soon to be put on display. The Bekaa Valley standoff between Syria and Israel was one of the largest aerial battles since WWII. In 1982, the Syrians had moved several SAMs into the Bekaa Valley after learning of Israel's operation to conduct retaliatory air strikes on the People's Liberation Organization (PLO) in southern Lebanon. Not to be deterred, the Israelis targeted the nineteen SAM sites and initiated a war between the Syrian and Israeli air forces.[31] Israel destroyed all the SAM sites as well as 84 Soviet-built fighters without a single loss.[32] This display of Israeli dominance demonstrated the significance of a coordinated, technologically superior air campaign.

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[29] Gaddis, *The Cold War*, 212.
[30] "CIA Report on Middle East" (CIA, April 29, 1977), 5, accessed April 18, 2014, http://www.foia.cia.gov/sites/default/files/document_conversions/1821105/1977-04-29.pdf.
[31] Hallion, *Storm Over Iraq*, 97.
[32] Budiansky, *Air Power,* 405.

Over the next several years, events occurring in Grenada, Beirut, Lebanon, Libya, and Panama offered the United States the opportunity to refine joint military operations and continue to assess Soviet weapon systems. For example, in 1986, two F/A-18s, while exercising in the Gulf of Sidra, successfully evaded a Libyan launch of at least two highly sophisticated Soviet-made surface-to-air SA-5s.[33] When three boats attempted to attack Naval assets shortly after the launch, A-7s and A-6s damaged them. In retaliation, Libyan-sponsored terrorists detonated bombs in a Berlin disco and a TWA airliner. The United States responded by sending a joint Air Force and Navy mission to strike targets inside the heavily defended Libyan territory. The United States' success began to breed confidence in new weapons systems and the ability to conduct highly coordinated attacks against sophisticated Soviet-built defenses.

At the close of the decade, the new Bush administration was immediately greeted with a conflict closer to home in Panama. When Panama dictator Manuel Noriega declared war on the United States and began to brutalize and murder American military personnel, the administration organized a military operation in response.[34] A coordinated Air Force, Army, Navy, and Special Operations contingent of 22,000 soldiers, 3,400 airmen, 900 Marines, 700 sailors and 200 aircraft descended on the continental isthmus.[35] The operation was a success, vindicating memories of joint operations in the jungles of Vietnam.

The character of war was changing once again, but this time it was moving away from nuclear conflict back toward the use of conventional means. The world stage was becoming populated with more aggressive states that had been armed with United States and Soviet ideology and weapons, extending the Cold War clash to the far reaches of the globe. The two main players both found themselves rising and falling at times with military and political setbacks, challenging the capability, credibility, and effectiveness of their national security apparatus. These tumultuous times of modernized battlefields, changing power structures, and combined military operations set the stage for the Services' most-dangerous scenarios.

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[33] Hallion, *Storm Over Iraq*, 97.
[34] Hallion, *Storm Over Iraq*, 114.
[35] Ronald Cole, *Operation Just Cause: Panama* (Washington, D.C.: Joint History Office, 1995), 2.

Most-Dangerous Scenarios

The Air Force and Army, aware of the defined national threat, devised distinct most-dangerous scenarios relative to their individual domains. This materialization provided each service the gauge from which to organize, train and equip. The Service's purpose and roles within the operating domain further influenced the construction of the most-dangerous scenario. A combination of national security concerns, the Service's perceived purpose, and assigned roles determined what the Air Force and Army viewed as the most-dangerous scenario. The previous section identified how the national security threat was conceived prior to Desert Storm. This next ascertains the Air Force and Army's new most-dangerous scenarios.

Air Force

Air superiority has been the number-one priority of the United States Air Force, preceding its independence. It was specifically labeled as the first priority and as a requirement for the success of any land operations. The first edition of FM 100-20, written in 1943, made this clear; "Air Forces must be employed primarily against the enemy's air forces until air superiority is obtained."[36] Air-to-air battle, as a prelude to air-to-ground battle, dominated the latter half of WWII. When nuclear weapons entered the strategic landscape, emphasis shifted from fighters to bombers. This shift was in line with Giulio Douhet's assumption that air superiority is best achieved by "destroying the enemy air force at the place where he is most vulnerable, which is on the ground and in his nest."[37] The United States could not afford to risk an air tango with the enemy when nuclear bombers were headed inbound. Therefore it developed and acquired bombers with speed and range able to not only destroy the enemy's nuclear capability, but also prevent follow-on attacks. As missiles came on line and increased in range and effectiveness, they took over as the primary player in the air battles, where missile exchanges began replacing the bomber role.

Coming out of the Vietnam War, the Air Force had begun to question the feasibility of using missiles or bombers to gain and maintain air superiority, short of full-

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[36] War Department, "Field Manual 100-20: Command and Employment of Air Power" (United States Government Printing Office, July 21, 1943), 1.
[37] Jacob Neufeld, *The F-15 Eagle: Origins and Development 1964-1972* (Washington, D.C.: Office of Air Force History, November 1974), 4.

scale nuclear war. Tied to this was the doubt that bombers and missiles were sufficient for a deterrent strategy for the full spectrum of conflict and could deliver assured destruction with increasing Soviet stockpiles. Air Force Chief of Staff, General George S. Brown, claimed, "it is no longer credible to think we will shoot everything and destroy as much of the Soviet Union, their weapons, production base, over every conceivable contingency with which we might face the Russians."[38] Even the new SAC commander had reservations about the efficacy of the assured-destruction strategy. General John C. Meyer stated, "The time has now come when not only Soviet and US strategic forces are in parity, but it is understood by the world to be so, or nearly so…That raises a question on the United States' ability to respond to a major adventurism on the part of the Soviets."[39] The Air Force Manual 1-1 Basic Doctrine, demonstrated this shift in thinking with the statement, "deterrence of [small powers or proxies for large powers] comes from the maintenance of sufficient general purpose forces capable of rapid deployment and sustained operations combined with the national resolve to deploy and employ these forces."[40] Beliefs and views within the Air Force were changing to accommodate the notion that conflict outside of a general war was possible; and strategic assets, bombers and missiles, may not have been fully suited for this new climate.

General nuclear war between the Soviets and the United States began to sink into the background. It remained the most devastating threat to the nation, and the Air Force was still preparing to respond to that scenario. However, after nearly 30 years of organizing, training, and equipping for nuclear retaliation, the growing risk of nuclear war had leveled off and stabilized. Many were becoming suspicious that nuclear Armageddon, although possible, was more the stuff of esoteric theory than war-fighting reality. The experience of Vietnam solidified for the Air Force the importance of having the capability to meet the political objectives, which might limit the character of the war. Air Force Basic Doctrine, revised in 1971, revealed this new thinking by focusing less on how the Air Force would win the general war and more on the capabilities it could provide for unified commanders. The document read, "But the departure point for

[38] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 347.
[39] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 347.
[40] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 721.

success – or if you prefer survival – is flexibility in our thinking, willingness to innovate and to change as we demonstrate the adaptability of our weapons systems and their unique responsiveness to changing news of national need." This realization and ongoing global events altered the Air Force's most-dangerous scenario.

The Soviet and Warsaw Pact military confrontation with Czechoslovakia in 1968 illuminated the aggressive intentions of the opponents as well as their improved conventional capabilities. It became readily apparent the Soviets had developed a formidable armored conventional force and were willing to use it in Europe. This action reaffirmed to the United States and its military the priority Europe played in foreign policy. "United States national security policy gave defense of Western Europe first priority after the defense of the United States."[41] The NATO Security Strategy had adopted the concept of flexible response one year before that in 1967. NATO affirmed flexible response by claiming in the revised Operational Planning Strategy, "Direct defense seeks to defeat the aggression on the level at which the enemy chooses to fight."[42] The world was moving away from the trip-wire, one-trigger/one-response, concept of mutually assured destruction. The use of conventional forces brought back to reality that, if a war kicked off, a battlefield would exist. Instead of exchanging nuclear blows over one another's home territory, military forces would fight for air dominance in in order to affect ground operations through interdiction and CAS. Thus, battles between aircraft would resume and become the key enabler of other conventional operations.

The Soviet Union's quantitative military advantage was always a given, but now the Soviets showed a qualitative advantage with some of their newest tactical platforms. The tactical air force's experiences in Vietnam "shocked the American fighter community because it demonstrated the unsuitability of the Century series fighters (and newer F-4 Phantom II) for hard-maneuvering air combat against older MiGs."[43] The Air Force was required to supply a deterrent capability, preventing Soviet aggression, in the

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41 Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 490.
42 North Atlantic Military Committee, *A Report by the Military Committee on Overall Strategic Concept for the Defense of the North Atlantic Treaty Organization Area (MC14/3)*, NATO Strategy Documents (NATO, January 16, 1968), 10, accessed April 22, 2014, http://www.nato.int/docu/stratdoc/eng/a680116a.pdf.
43 Richard P. Hallion, *Storm Over Iraq: Air Power and the Gulf War* (Washington, D.C.: Smithsonian Institution Press, 1992), 27.

European theater. NATO anticipated air forces would be required to sustain a conventional conflict for 90 days (eventually extending to 6 months) while maintaining the capability to escalate if necessary. This requirement, along with lessons from the 1973 Arab-Israeli conflict and the Soviet conventional build-up, presented evidence that future conflicts would be littered with conventional assets, including tactical fighters and surface-to-air defense systems. The Air Force adopted a new role. Instead of focusing solely on delivering nuclear weapons via strategic bombers to the opponent's heartland, under a limited war the Air Force would be required to provide specialized and proficient tactical capabilities to counter Soviet conventional forces. From this the original purpose of the air forces resurfaced and assumed primacy. Air superiority again became the *sin qua non* of the air service. If the Soviets chose to make an aggressive limited move in Europe, the United States would respond in kind, therefore, theater counterair operations were essential.

Counterair had become a crucial element to the success of all other missions to include interdiction and CAS. It was anticipated that the Soviets would attempt to make an aggressive conventional push with heavily armored ground forces and associated air forces against NATO forces in Central Europe. The threat posed by the Soviet air forces challenged the United States' ability to reach targets that would halt Soviet surface operations and protect NATO territory. The Air Force knew that, without air superiority, follow-on air and ground operations would not be successful. Therefore, the Air Force's most-dangerous scenario was countering a high-intensity, high-density air war in the European theater against the Soviet Union and Warsaw Pact. In this scenario, reminiscent of WWII, the Air Force's number one role would be to gain and maintain air superiority.

Since gaining independence in 1947, the Air Force held a position of strategic importance by guaranteeing the security of the nation and the lives of its citizens and soldiers. It was believed the other military components depended on the Air Force as well. Its ability to retaliate decisively through nuclear strategic bombing in the heart of the Soviet Union made the other missions possible. This role placed the Air Force at the front of the line in budget battles; it elevated its prominence in national policy and made it strategically significant in the fight. All of these reinforced the Air Force's

independence. Transitioning to conventional war fighting threatened many of these cherished benefits. By focusing on the role of air superiority in the next fight, however, the Air Force was able to preserve the independent and distinct nature of its Service. Instead of arguing that, without the Air Force conducting strategic nuclear bombing, the rest of the campaign would suffer, the dialogue shifted to the argument that, without air superiority, ground operations, CAS, and interdiction would be degraded or even inhibited.[44] This newly elevated purpose allowed the Air Force to retain its preeminence in the conflict and amplify its independent war-fighting desires while maintaining apportionment control, multipurpose aircraft, and first-in sequencing.

Unlike strategic nuclear attack, the counterair mission is integrated into the theater campaign. This inherently places the Air Force in a position where it must acknowledge and potentially coordinate actions with the other Services. Depending on the opponent's air force and the size of the theater, securing air superiority may be a campaign-long process and revolve around battles fought in the air. Given this prospect, the Air Force would prefer to have multipurpose aircraft capable of performing air-to-air missions as well as air-to-surface to capitalize on the indivisible nature of airpower. All the Services agree counterair is a prerequisite for effective surface operations. Therefore, when the Air Force is apportioning its assets, counterair missions are typically given priority over other surface-support missions such as interdiction and CAS. This also theoretically sets the Air Force up for entering the fight first to sanitize the airspace. First-in sequencing implies the United States has been able to dictate the time and place of the fight versus respond to aggression like in Korea and Vietnam, where air and ground operations were conducted simultaneously. In a scripted world, the Air Force would lead the way in the theater, conducting countair followed by interdiction, and when successful prevent the Army from even engaging the opponent in a land war.

Army

Returning home from Vietnam was a sobering experience for the senior Service. The Army had spent the years following Korea advocating for its role in deterring limited aggression; and, if deterrence failed, its ability to fight the full-spectrum of conflicts. Vietnam deflated this rhetoric. The Army took from Vietnam only the lessons it wanted

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[44] Hallion, *Storm Over Iraq*, 117.

to learn and forged ahead into the interwar years refocusing on the European continent. Army Field Manual 100-5, Operations, updated in July 1976, confirmed the Army's focus; "Because the US Army is structured primarily for [battle in Central Europe] and has large forces deployed in that area, this manual is designed mainly to deal with the realities of such operations."[45] General Andrew Goodpasture, Supreme Allied Commander, Europe (SACEUR), expressed this when he said, "Our forces are effective in deterring an attack, and this has always been our primary objective."[46] In the 38-week course at the Army Command and General Staff College in Leavenworth, Kansas in 1972-73, the majority of the 1,430 academic hours were spent on NATO scenarios.[47] Studying, planning, and training to these scenarios would continue to dominate the Army even through the fall of the Berlin Wall.

The urgency to regain a post-Vietnam focus was aided by the Yom Kippur War. The Army studied the war diligently and gained valuable lessons for future warfare. For soldiers who spent the last decade traversing the jungles of Vietnam, it was a welcome relief to see the role of tanks and antitank capabilities in a modern army.[48] Along with a sense of comfort with future warfare, the technological advancements also brought in a sense of anxiety. During the Yom Kippur War both sides lost more tanks and artillery than the United States Army had in its entire inventory.[49] Observing this catastrophe, the United States Army derived three principles of modern warfare.[50] First, modern weapons were far more lethal than earlier versions. Second, combined-arms of armor, mechanized infantry, field artillery, and air defense were a necessity. Lastly, training was key to successful maneuvers and combined arms. With the creation of TRADOC, the Army was well on its way to institutionalizing and codifying these lessons for future warfare.

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[45] Bernard W. Rogers, "Army Field Manual 100-5, Operations" (Department of the Army, April 1977), 1-2.
[46] Trauschweizer, *The Cold War U.S. Army*, 198.
[47] Donald J. Mrozek, *The US Air Force After Vietnam: Postwar Challenges and Potential Responses* (Maxwell Air Force Base, AL: Air University Press, 1988), 38.
[48] Trauschweizer, *The Cold War U.S. Army*, 201.
[49] Harold R. Winton, "An Ambivalent Partnership: US Army and Air Force Perspectives on Air-Ground Operations, 1973-90," in *The Paths of Heaven: The Evolution of Airpower Theory*, ed. Phillip S. Meilinger, 8th ed. (Maxwell Air Force Base, AL: Air University Press, 2010), 405.
[50] Trauschweizer, *The Cold War U.S. Army*, 202.

The new Army operations field manual explicitly stated the most-dangerous scenario facing the United States Army. The document read, "Battle in Central Europe against forces of the Warsaw Pact is the most demanding mission the US Army could be assigned."[51] NATO ground forces were still facing a war against the overwhelming forces of the Soviet Union and the Warsaw Pact. The difference between this future battle and the post-Korea environment was the arrival of advanced conventional weapons. The technologically modern conventional weapons offered nations the opportunity to conduct war with less concern for escalation to nuclear war because conventional weapons were so effective. The commander of TRADOC, General William DuPuy, crafted the first doctrine for countering the Soviet threat in Western Europe. General DuPuy believed that modern wars would involve decisive, rapid engagements won or lost within the opening battles. He built his active defense doctrine on the presupposition that "combat would be concluded before vast troop movements across continents could affect its outcome."[52] Therefore, active defense would entail using all of the forces up front to target oncoming Soviet forces and patiently wait for the appropriate time to concentrate fires on the most critical points. This plan required immense amounts of coordination and training because the forces had to perform nearly perfectly from the beginning. Critics of this concept argued that active defense did not take into consideration the follow-on or second-echelon forces.

General Donn A. Starry took over as TRADOC commander from DuPuy and set about modifying the active-defense doctrine in light of the criticisms. After a few modifications, initially called Extended Battlefield, the new Army doctrine emerged as AirLand Battle. The doctrine was based on NATO forces shaping the battlefield and using four military principles to do so: initiative, depth, agility, and synchronization.[53] The biggest change was recognition that NATO would have to interdict the enemy forces before they joined the battle to ensure the opponents of NATO's already outnumbered front-line troops were not reinforced. Combined arms were crucial to the modern battlefield and the AirLand Battle doctrine. This was spelled out in the revised FM 100-

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[51] Rogers, "FM 100-5, Operations.", 1-2.
[52] Trauschweizer, *The Cold War U.S. Army*, 205.
[53] Hallion, *Storm Over Iraq*, 77.

5: "The character of modern battle and the geographical range of US national interests make it imperative that the Army fight as part of a team with the tactical forces of the US Air Force, the US Marine Corps, and the US Navy."[54] The one deceptive element with the AirLand Battle combined-arms concept was where and how the Services contributed to the effort. The AirLand battle was built on the foundation of the "extended battlefield," where the area of combat was significantly larger than previously considered. Under this construct, the Air Force would be primarily responsible for the deep targets, and the combined arms of the Army would manage the targets close to the ground forces. Within the Army's organic combined arms, there was infantry and mechanized infantry, along with the tank that provided the most immediate lethal firepower. Then the artillery would offer firepower to maneuver elements while air defense artillery provided protection from enemy CAS. Finally, Army aviation's attack helicopters would provide firepower, and the air cavalry would bring mobility.[55] The Army viewed AirLand Battle as its core operational concept and the way the Army would fight its battles and campaigns.

The doctrine was devised specifically for the Army's most-dangerous scenario. Both active defense and AirLand Battle were constructed for the purpose of fighting the Soviets in Central Europe and preventing the aggressive overrun of NATO nations. This most-dangerous scenario was no longer filled with tactical nuclear weapons, rather overwhelming mechanized ground forces, technologically advanced and rapidly mobile. To prepare for this most-dangerous scenario, the Army would quickly transform itself from the Vietnam conscripted citizen soldier to a highly mechanized conventional, all-volunteer force.

Crisis

This section is an examination of some of the events triggering crises from the end of Vietnam to the start of Desert Storm. Again, it is beyond the scope of this paper to capture all of the events that triggered a crisis in the two decades between the wars.

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[54] E.C. Meyer, "Army Field Manual 100-5, Operations" (Department of the Army, August 1982), 1-5.
[55] Trauschweizer, *The Cold War U.S. Army*, 225.

Instead this section will present three main triggers creating crises for the Air Force: austere budgets, Soviet technological advancements, and political oversight. Throughout the interwar years, the Air Force viewed these triggers in light of the new most-dangerous scenario with both urgency and uncertainty. These coupled with a perceived threat to basic values of the service to create crises. The decisions the Air Force made in response to the crises created conditions for cooperation and conflict.

Budget

Department of Defense spending was reduced prior to the Vietnam cease-fire due more to dwindling public will than political necessity. President Nixon campaigned on a platform that promised an end to the war in Vietnam and a reduction in military spending. To satisfy public desires, he succeeded in meeting those promises when he came into office. According to a CATO Institute report on military budgets, "The bulk of the military retrenchment during 1972-76 reflected public and congressional revulsion against militarism and the cold war rather than savings associated with the reduction and eventual cessation of U.S. involvement in the Vietnam War."[56] Over the course of his tenure, President Nixon reduced defense spending by 29%.[57] The Air Force itself had taken a 33% budget cut during that period, and General McConnell, Air Force Chief of Staff, stated he was leaving the Air Force with "less air power than when he became Chief of Staff four-and-a-half years ago."[58] The plan for procuring FB-111 strategic bombers was eliminated and the B-58 bombers were phased out of the 1970 budget. Along with these cuts, there was an overall reduction in the number of tactical aircraft, from 5,000 to 4,600.[59] Platforms took a hit during the Nixon era, but a major reduction in resources came from the pool of personnel. Nixon ended the draft and began the Total

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[56] Robert Higgs, *U.S. Military Spending in the Cold War Era: Opportunity Costs, Foreign Crises, Ad Domestic Constraints*, CATO Institute Policy Analysis No. 114 (Washington, D.C.: CATO Institute, November 30, 1988), 2.
[57] Lawrence J. Korb, Laura Conley, and Alex Rothman, *A Return to Responsibility: What President Obama and Congress Can Learn About Defense Budgets from Past Presidents* (Washington, D.C.: Center for American Progress, July 2011), 15, accessed April 22, 2014, http://www.americanprogress.org/wp-content/uploads/issues/2011/07/pdf/defense_budgets.pdf.
[58] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 478.
[59] Korb, Conley, and Rothman, *A Return to Responsibility*, 18.

Force concept, cutting manpower and shifting resources and mission areas to the Guard and Reserves. From 1968 through 1979, the Air Force had been reduced from 905,000 personnel to less than 555,000.[60] This period of cutbacks in manning led to pilot shortages in the Air Force, creating uncertainty and threatening its ability to meet the Soviet air forces with any sense of parity above projected battlefields.

After Nixon left office, President Ford started a slight increase in military spending. Following in the footsteps of the Ford administration, President Carter maintained about a 10% increase in the defense budget. Although there was an increase, the Services still faced budget crises. On 30 June 1977, President Carter cancelled production of the B-1. The reason provided was that the current platforms and resources at hand were capable of successfully delivering a retaliatory blow to the Soviet Union.[61] The shift from a nuclear focus to conventional capability absorbed the majority of the increased spending.

Congress became heavily involved in military affairs and spending and began to squeeze money out of the defense budget as it witnessed Service procurement issues and inflation levels skyrocket. Senior leaders were forced to advocate for their programs and prioritize weapon-system procurement. When General John Ryan replaced McConnell later that year, he established the priorities of the Air Force budget, reflecting the new focus of political leadership on conventional capabilities. In congressional testimony he explained, "The F-X air superiority fighter had precedence, followed by the B-1 strategic bomber, then the Airborne Warning and Control System (AWACs) plane, and finally the A-X."[62] Between 1968-1974 there was a 37 percent decrease in defense spending.[63]

The early years of the Reagan administration brought in a boom in defense spending compared to the more frugal 1970s. The first three years of his administration witnessed roughly a 40% increase in the defense budget. He was adamant about

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[60] Bernard C. Nalty, ed., *Winged Shield, Winged Sword: A History of the United States Air Force Volume II 1950-1997* (Washington, D.C.: Air Force History and Museums Program, 1997), 339-340.
[61] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 354.
[62] Douglas N. Campbell, *The Warthog and the Close Air Support Debate* (Annapolis, Maryland: Naval Institute Press, 2003), 11.
[63] Allen R. Millet and Peter Maslowski, *For the Common Defense: A Military History of the United States* (New York, New York: The Free Press, 1984), 566.

rebuilding the hollow military the previous administration had created, and focused on investing in conventional hardware. One of the few Air Force strategic assets placed in the new budget was the B-1B aircraft. But by the mid-1980s, Congress had become suspicious of potential fraud, waste, and abuse in the Department of Defense and in an attempt to reduce the $200 billion national deficit, targeted the Pentagon for cuts. The 1986 Defense Budget was the first to take a hit with a congressionally mandated $5.8 billion cut based on the Gramm-Rudman-Hollings Bill.[64] Although the law was eventually found unconstitutional, the 1986 cuts still went into effect. For the Air Force, the impact of this slice hit the procurement inventories of B-1B bombers, F-15 C/D/E fighters and KC-10A tankers.[65] President Reagan's second term targeted conventional systems with cuts and refocused on strategic defense assets.

Over the course of the two decades, there was a cyclical rise and fall of defense spending. From an historical perspective, the sine wave may appear predictable, but for those involved, the budget was a roller coaster full of blind turns in addition to ups and downs. The programs and aircraft vital to the purpose and mission of the Air Force during this time required a long-term fiscal outlook. Weapons systems were not designed, developed, and made operational within one president's term. It was imperative for the Air Force to have a consistent procurement budget to secure the future; however, this was typically the pot from which most of the funding was pulled during the downturns. This uncertainty bred an urgency to communicate the necessity of the weapon systems most vital to the most-dangerous scenario. When the budget targeted these systems, the Air Force's basic values were threatened. Responses to these peaks and valleys throughout the two decades of peace facilitated both cooperation and conflict with the Army.

Technological Advancements

While the United States was involved in Vietnam, the Soviets vigorously modernized the its own and Warsaw Pact military forces. The Soviets were consistent

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[64] Bernard C. Nalty, ed., *Winged Shield, Winged Sword: A History of the United States Air Force Volume II 1950-1997* (Washington, D.C.: Air Force History and Museums Program, 1997), 536.
[65] Korb, Conley, and Rothman, *A Return to Responsibility*, 21.

throughout the 1960s with the habit of focusing on quantity over quality. In 1967, however, the United States saw the first hint that the Soviet Union was shifting its focus to better technology to accompany large inventories. "The appearance of the MiG-25 at a Soviet Air Show was equivalent to the United States never procured F-12."[66] The Soviets had also significantly bolstered their frontal aviation units with new MIG-21s, Su-17s, and MIG-23s. "By 1975, in NATO's northern and central regions, 3,000 NATO tactical aircraft faced 5,000 Warsaw Pact planes."[67] It wasn't just in the air domain the Soviets had achieved a level of technological and numerical superiority. "The Soviets had blended its [sic] superiority in numbers with new equipment for mechanized and armored formations as well as artillery under the doctrine of mass momentum—continuous land combat." [68] From 1968 to 1973 the Warsaw Pact forces in Central Europe increased by six combat divisions and the Eastern European forces were reequipped with 1500 new tanks.[69] The improvements to the Soviet tactical air forces sparked a high degree of urgency and uncertainty within the Air Force. The upgrades directly challenged the Air Force's ability to secure air superiority and threatened its most-dangerous scenario.

Along with upgrades and new additions to the air forces and ground forces, the Soviet Union was developing an even greater number of missiles. SAC planners briefed the administration in 1970 claiming the "Soviet Union had the capability to wreck more havoc on the United States in a first strike than the United States could retaliate with a second strike."[70] This revelation called into question the purpose of an intricate air defense system and the United States' missile inventory. In December 1977, the Soviets successfully tested the SS-18 and SS-19 with new guidance systems capable of targeting and taking out the Minuteman missile silos.[71] It was anticipated that by 1981-1982 the Soviets would have the capability to "affect 80 to 90 percent PK on Minuteman silos" and the United States would be unable to respond given the current state of the

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[66] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 493.
[67] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 494
[68] Trauschweizer, *The Cold War U.S. Army*, 197.
[69] Trauschweizer, *The Cold War U.S. Army*, 197.
[70] Millet and Maslowski, *For the Common Defense*, 567.
[71] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 355.

inventory.[72] A defense analyst coined the term "window of vulnerability" to describe the gap in America's capability. Shortly following tests of the new ICBMs, the Soviet Union deployed a new and highly accurate intermediate-range missile, the SS-20, to Eastern Europe.[73] Soviet surface-to-air missile technology was improving alongside these advancements. The United States witnessed the demonstration of Soviet-built SAMs in the Yom Kippur War, the conflict in Lebanon, and the attacks in Libya. Soviet missile technology presented the Air Force with uncertainty in defending United States' territory as well as its basing in Europe. There was urgency to build survivable aircraft to counter the (surface-to-air missile) SAM threat. In the most-dangerous scenario it was vital for the Air Force to be able to achieve air superiority in order to interdict the deep targets and allow freedom of maneuver to the surface forces.

Political Oversight

During the Vietnam War, Congress and political administrators became intimately involved in military decision-making and activities. In the late 1960s, Congress began to absorb the heat of public discord and outcry over the Vietnam War. Alongside this pressure, members of Congress had been receiving recurring questions regarding the adequacy of CAS in the war. In the fall of 1965 a Special Subcommittee on Tactical Air Support was directed to examine close air support, developing and producing of new types of aircraft for tactical warfare, and the future capacities for maintaining air superiority.[74]

Political oversight of the military Services became a common occurrence throughout the remainder of the Vietnam War and continued in the two decades to follow. It came from Presidents, Congress, Secretaries of Defense, and even outside commercial companies hired to study military effectiveness. President Nixon sanctioned the Blue Ribbon Defense Panel in 1969. It was a broad study on the entire military

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[72] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 355.
[73] John Lewis Gaddis, *The Cold War: A New History* (New York, New York: Penguin Group, 2005), 202.
[74] Otis G. Pike, *Close Air Support: Report of Special Subcommittee on Tactical Air Support* (Washington, D.C.: Committee on Armed Services House of Representatives, February 1, 1966), 4859.

establishment, but one of the objectives was to look at the organization and management of the Services.[75] A few years later, in 1971, a few congressmen were concerned about the procurement of overlapping CAS systems, the Army's Cheyenne helicopter and the Air Force's A-X aircraft. Responding to congressional interests, Secretary of Defense Melvin Laird established a high-level CAS review group. One of the results of the group was the cancellation of DOD Directive 5160.22.[76] The removal of this directive, *Clarification of the Roles and Missions of the Departments of the Army and Air Force Regarding Aircraft (1957)*, occurred during the time when the Air Force and Army were promoting their individual future CAS platforms.

Many of the congressional members retained their positions throughout the interwar years, continuing to dig into the Department of Defense. On top of those inquires, subsequent presidents instituted their own reports. In 1977, President Carter initiated a Defense Organization Study, taking another broad look at how the defense establishment and Services were executing their missions. The combination of unsuccessful military operations and what appeared to be a hollow force structure prompted the Reagan administration to investigate defense requirements, force structures, and procurement processes. Sparked by the outgoing testimony of Chairman of the Joint Chiefs of Staff General David C. Jones in the early 1980s, the Senate formed a committee to analyze reforming the entire Department of Defense.[77] This prompted a three-year endeavor causing a major reorganization resultant to the Goldwater-Nichols Act of 1986. A few of the major elements of this document insisted on more civilian control over the military and organizational focus on joint operations.

Inter-service Relations

This section examines the Air Force's response to the crises it experienced and the impact they had on inter-service cooperation in CAS. The analysis will focus specifically on how decisions regarding the Air Force's organization, training, and aircraft procurement affected the close-air-support mission using Lina Svedin's criteria

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[75] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 588.
[76] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 523.
[77] James R. Locher III, "Has It Worked? The Goldwater-Nichols Reorganization Act," *Naval War College Review* 24, no. 4 (Autumn 2001): 102.

for detecting cooperation or conflict.

Organization

The organizational structure of military forces in Europe throughout the Vietnam War reflected the belief that war would be dominated by nuclear weapons and therefore short. The adoption of the flexible-response concept and the increased likelihood that combined-arms conventional forces would dominate war drove the Services to rebalance NATO forces for effective conventional defense. For United States Air Forces Europe (USAFE), the transformation merged three of the numbered air forces into operational functions and moved two numbered air forces to new locations.[78] The USAFE headquarters was moved from Lindsey Air Station in Wiesbaden to Ramstein Air Base in 1973 to facilitate a closer relationship between the allied air forces as well as the ground forces.[79] This reorganization brought air and ground parties together in Europe. Cooperation was enhanced by the proximity of the headquarters, and it was necessary in order to plan and train for the impending scenario of Soviet forces attacking NATO. This setup is similar to the TAC's move in the 1940s to be co-located with the Army Ground Forces in Virginia pre-Korea. Also new, NATO forces were intermingled with the Services throughout the planning and training process. Many of the European nations were opposed to CAS; based on their limited air assets, they preferred to allocate resources to battlefield interdiction and attacks on second-echelon forces. This allegiance of thought toward the segregated mission sets allowed the Air Force to gravitate toward the NATO partners' vision on the allocation of airpower in Europe. It also reinforced the United States Air Force's role in fighting its most-dangerous scenario, since the European nations did not have the equipment to conduct large-scale counterair missions. Interestingly, although there was a high degree of coordination between allied air and ground forces, it did not bolster the United States' ability to conduct CAS.

During this time another combined-forces headquarters was being stood up. When the conflicts between Syria and Israel, the Soviet Union and Afghanistan, and internal strife in Iran arose, the Carter administration reaffirmed the Gulf as a vital area of

[78] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 499.
[79] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 497.

interest. This was represented by the creation of the Rapid Deployment Force (RDF), which would eventually become U.S. Central Command (USCENTCOM). Although the RDF was the first peacetime Joint Task Force incorporating all four Services, United States military forces were consistently operating in joint and allied environments, developing inter-service relationships, and creating linkages between coalition partners.[80] Yet, there is a point to consider here: the appearance of a high level of cooperation during peacetime masks the groupthink effect that was occurring. According to Irving L. Janis, groupthink is an "excessive form of concurrence-seeking among members of high prestige, tightly knit policy-making groups."[81] The Service chiefs and senior leaders who made up the higher headquarter staffs, such as USAFE; reflect the type of group Janis is referring to. He claims that by being a part of the group causes the "members to strive for a quick and painless unanimity on the issues that group has to confront."[82] During the interwar years, where the failures of Vietnam highlighted the consequences of segregated operations and brought upon the Services elevated political oversight, it became crucial for them to value the groups. It became easier and more fruitful to broadly agree than risk highlighting the Service by disagreeing. It was beneficial to building relationships, especially when all parties were focused on the same threat and most-dangerous scenario, where certain mission areas and capabilities were analyzed and coordinated. Unfortunately, groupthink allowed the Services to appear to be headed in the right direction solely because they were traveling down the same road.

Facing the crisis in tight budgets from 1968 through the late 1970s, the Air Force looked for ways to maintain its ability to fight in the most-dangerous scenario. Returning from the war, the Air Force had already reduced its structure from 32-wings down to 21. By 1974 the Air Force had requested 40 wings, but budget constraints kept the program at 26 wings through the remainder of the decade. In an effort to find money, the Air Force capitalized on the more cost-effective specialized aircraft like the A-10 and took big cuts in its manpower pool. The Air Force regularly attempted to increase the fleet by increasing the requirement for wings. Since the 40-wing program was too expensive, the

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[80] Hallion, *Storm Over Iraq*, 109.
[81] Paul 't Hart, "Irving L. Janis' Victims of Groupthink," *Political Psychology* 12, no. 2 (1991): 247.
[82] Hart, "Irving L. Janis' Victims of Groupthink," 247.

Air Force had to consider maintaining the same number of platforms by outfitting the wings with multipurpose aircraft, and the F-16 was both affordable and multirole. These decisions did not significantly impact the relationship between the Air Force and Army, since the assets needed to fight the most-dangerous scenario were kept in place. Cost-effective equipment allowed the Service to maintain the tactical assets it needed to support the mission. Unexpectedly, as the budget swung upward when President Reagan took office, the Air Force was able to secure funding for the 40-wing program and set its sights on an even larger number of wings in the future.

The budget cuts of 1986 presented the Air Force with a crisis. Although it was originally approved, a new lack of funding forced the Air Force to abandon its goal of the 40-wing program, down to 37 wings, which was already a compromise from the 70 wings originally requested.[83] Lt General Kelly Burke stated, "We cannot neglect tactical aircraft modernization and force expansion programs because of the evolving Soviet threat."[84] One of the main arguments made by the Air Force for the increase in the wing program was the need to acquire 100 tactical aircraft per year to match the Soviet threat and conduct the tactical missions of counterair, and interdiction, which were necessary for air superiority. The Air Force and Army demonstrated a high level of cooperative behavior during this time, both approaching Congress with a unified front on the direction of the Air Force.

Based on a largely overlapping most-dangerous scenario and the crisis presented by the Soviet conventional threat, the Air Force and Army had a shared interest in each other's responses. For the Air Force, the primary purpose of air superiority, gained through counterair and interdiction, was to enable ground forces freedom of maneuver. Army doctrine in the 1976 FM 100-5 reminded commanders that its battlefield success was dependent on the Air Force. This appreciation of the current context rekindled the TRADOC and TAC relationship initiated by General Quesada prior to the Korean War.

The commanders of each organization nurtured the relationship, and the continual interaction and communication became known as the "TAC-TRADOC dialogue". One of the first actions taken by the organizations was to create an Air Land Forces

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[83] Nalty, *Winged Shield, Winged Sword Vol II*, 537.
[84] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 564.

Application (ALFA) agency. The role of this agency was to work out procedural problems in Army-Air Force cooperation.[85] From this association several working groups emerged to deal with specific issues, such as airspace de-confliction over the battle area. This relationship set the example of cooperative behavior; it meets all of the criteria Lina Svedin outlines in her organizational cooperation theory.

Without significant distractions, Air Force and Army leaders were free to hone each of their organizations according to a common most-dangerous scenario. At the end of the 1970s, the Air Force began to focus more directly on precision munitions and technological solutions to face the overwhelming number of Soviet threats. At the same time, the Army began to question its approach to the battlefield and decided to slowly adopt General Starry's concept of the extended battlefield, which would eventually become AirLand Battle. The Army's focus on the second echelon and the extended battlefield brought interdiction into its perspective. As the interdiction mission now became a concern for both the Army and the Air Force, the inter-service relationship was tested.

The Air Force had mixed reactions to the Army AirLand Battle doctrine. In 1983 Air Force and Army Chiefs of Staff signed a memorandum demonstrating the Air Force's acceptance of AirLand Battle.[86] Nonetheless, a member of the ALFA agency stated, "[the Meyer-Gabriel MOU] does not acknowledge AirLand Battle doctrine as the sole governing principle for joint training and exercises, nor does it concede unequivocal primacy of AirLand Battle doctrine over established Air Force doctrine."[87] One of the major elements to AirLand Battle that placed a small wedge between the Services was a new component to the battle space, battlefield air interdiction (BAI).

The Services anticipated that the Soviet combined-arms threat would present itself in three waves, with the first echelon 30 kilometers deep, the second echelon 50-60 kilometers deep, and the third echelon roughly 100 kilometers deep. With advanced artillery and an expectation that the ground forces would be able to mobilize more rapidly with indigenous air mobility and armed helicopters, the Army wanted to control the fires

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[85] James C. Slife, *Creech Blue: Gen Bill Creech and the Reformation of the Tactical Air Forces, 1978-1984* (Maxwell Air Force Base, AL: Air University Press, 2004), 11.
[86] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 551.
[87] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 551.

against the second-echelon forces. NATO had recently adopted the BAI concept in the most recent Allied Tactical Publication. Establishing BAI, the Army was entering into an area where the Air Force deemed its role and responsibilities primary, and this created some consternation within the air service. Unlike CAS, interdiction was conducted without permissions or ground control, given the absence of friendly forces. Commander of TAC, General William Creech, set the tone for the Air Force by making the statement, "We cannot allow [the enemy] to arrive at the forward edge of the battle area unimpeded. And that suggests, in both the Army and the Air Force, weapons of interdiction of the second echelon."[88] This sentiment filtered down, drowning out most of the critics, when the BAI definition was placed in Air Force doctrine in 1984. That same year, the Air Force and Army worked for six months on initiatives for organizing, training, and equipping a total force that maximized joint air-land operations.[89] The result of this event was a memorandum between Air Force and Army chiefs of staff, commonly referred to as the 31 Initiatives.

In the entire document, only one initiative specifically dealt with CAS. Initiative #24 read, "The Army and the Air Force reaffirm the Air Force mission of providing fixed-wing CAS to the Army."[90] This is the first glimpse into how CAS fit into the cooperation between the two services. For decades there had been a significant tension between them on roles and responsibilities with regard to the CAS mission. Over the decade following the Vietnam War, TAC and TRADOC worked regularly to resolve air-land combat issues. The product of that cooperation was a newly defined battle space with an area of demarcation between CAS targets and interdiction targets called BAI, and a single initiative reiterating that the Air Force was responsible for fixed-wing CAS. In this unique case, although there was a significant level of cooperation, when it came to the CAS mission, the issues were avoided or masked.

Entering the late-1980s, the increasing chasm between where the Air Force and Army operated on the battlefield widened with a nudge from Colonel John A. Warden treatise on air campaigns. Perceiving a corrupting influence of AirLAnd Battle on the

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[88] Slife, *Creech Blue,* 34.
[89] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 555.
[90] Richard G. Davis, *The 31 Initiatives: A Study in Air Force - Army Cooperation*, Air Staff Historical Study (Washington, D.C.: Office of Air Force History, 1987), 113.

Air Force's strategic role and counterair priority, Warden was determined to halt the deterioration. Warden believed, "AirLand battle doctrine would allow the Army to dictate key decisions, which could result in nothing more than a tactical, Army-oriented Air Tasking Order (ATO) rather than an operational-level air campaign."[91] His book, *The Air Campaign: Planning for Combat*, put forth that air power could still be used to win a war. Common thinking prior to his publication was that the United States' Air Force had been the key to defeating the Soviets because of its nuclear bomber and missile capabilities, but now that the war would most likely be a conventional fight, the Air Force was a member of the joint team, supporting the land war. Warden exalted that "war can be won from the air."[92] He advocated that the Air Force could still independently defeat the Soviets, but instead of using nuclear weapons it would use precision munitions on decisive points in the command, control and communication system; logistics; infrastructure; support personnel; and military forces. Although Warden was one individual his ideas and promises on the use of airpower to achieve war-winning capability filtered down throughout the Air Force, sparking a new way of thinking about and planning for air operations. His influence touched revisions to Air Force Doctrine, Defense Planning Guidance (DPG), Quadrennial Defense Review (QDR), Constant Demo Exercise, and Air Force journals. The Air Force locked in on Warden's theory because it reinforced the subordination of other operations to the Air Force gaining air superiority, which matched its most-dangerous scenario.[93] The theory then reiterated the primacy of air forces in military campaigns. Warden's ideas allowed the Air Force to climb away from the Army's AirLand battle doctrine. Approaching the end of the interwar period the established sanctuary, BAI, where the Air Force and Army had found common ground began to view and the relationship devolved to the middle ground between conflict and cooperation: coordination.[94]

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[91] John Andreas Olsen, *John Warden and the Renaissance of American Air Power* (Washington, D.C.: Potomac Books, Inc., 2007), 65.
[92] John A. Warden, *The Air Campaign: Planning for Combat* (Washington, D.C.: National Defense University, 1988), 39.
[93] Warden, *The Air Campaign: Planning for Combat*, 17.
[94] During Desert Strom there was controversy between the Services whether the JFACC was a commander or merely a coordinator.

Training

Most training exercises took a pause during the Vietnam War. Despite the manning shortfall created by the budget crisis, the Air Force was compelled to ensure the force was sufficiently trained. The belief was that a small force required high-caliber personnel. Following the war, the Air Force focused its training on the most-dangerous scenario. The training was intended to teach its "aircrews to defeat the hordes of Soviet fighters certain to be encountered in any air battle over Europe."[95] The epitome of this was the creation of the Red Flag Exercises in 1975. The Red Flag Exercise substantiated the most-dangerous scenario and executed it over and over again. In this virtual air war, "Attack forces flew in large strike packages, just as they would in battle, encountering 'Aggressor' squadrons that imitated MiG tactics, and facing mock SAMs that were fired at them."[96] Along with the flag exercises, when the Aerospace Defense Command was disbanded in the late 1979, TAC also took over the William Tell Interceptor Competition.[97] These events focused training on the air war, reinforcing the role the Air Force would play in its most-dangerous scenario. The Red Flag exercises were seen as such a success that they sparked a series of colored exercises such as Blue Flag, Green Flag, etc. Blue Flag tested aircraft maintenance on how many sorties it could generate during simulated combat operations. Green Flag specifically exercised tactical air forces and ground forces, testing their tactics, techniques, and procedures according to the Soviet threat.

Some of the key lessons garnered from these exercises and simulations reinforced the threat posed by Soviet second and third-echelon forces, including the SAM threats, leading Air Force leaders to focus their attention even more on interdiction. General Creech, recognizing the importance SAMs had on air superiority, claimed, "We are now going to make defense roll-back and taking the SAMs out our first order of business."[98] Although the Air Force was focusing on interdiction, this actually complemented the Army's most-dangerous scenario. The adoption of AirLand Battle depended on Air Force efforts in the extended battlefield. Operating in the same battle space, the two

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[95] Nalty, *Winged Shield, Winged Sword Vol II*,347.
[96] Budiansky, *Air Power*, 398.
[97] Nalty, *Winged Shield, Winged Sword Vol II*, 346.
[98] Slife, *Creech Blue*, 28.

Services distributed forces to designated areas of operations, near versus deep battle. The BAI buffer helped the Services avoid issues over command and control and allocation. The various exercises and training events during the interwar years reinforced a mutual existence, in turn promoting coordination and cooperative behavior between the Services, as long as each maintained the image of its most-dangerous scenario.

Platforms

During the Vietnam War, political oversight of the CAS mission began to occur. Compounded by the results of the Disosway Board, Howze Board and the McNamara-directed CAS studies; political leaders became intimately involved in and held congressional hearings on the Air Force's effectiveness in providing CAS. Within two months of a House Armed Services subcommittee visiting Vietnam and recommending the acceleration of a COIN-type aircraft, and one month after the creation of the special subcommittee, the Air Force began to show interest in developing a light armed reconnaissance aircraft (LARA).[99] To initiate the effort, in July 1966, the Air Force instituted the Directorate of Doctrine, Concepts, and Objectives (USAF/XOD). One of the first studies to be conducted was to "determine what areas of close air support were not being fulfilled by the Air Force to the satisfaction of the Army."[100] The study concluded the Air Force should take immediate steps to obtain a close-air-support aircraft.

During the war a tension had developed between congressional pressure to build a CAS-specific platform and the need to build air superiority platforms. The Vietnam War presented difficulties in the air and ground wars, requiring the Air Force to conduct missions ranging from CAS to deep interdiction to air superiority. The Air Force, consistent with its doctrine of indivisibility of aircraft, had multirole fighters operating in country. Unfortunately, the F-111s and F-4s of the time were not meeting the needs in combat. Lt Col John W. Bohn, Jr. conducted a study to determine the most efficient way to develop the future force and submitted it in his *Force Options for Tactical Air Study*.

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[99] Pike, *Close Air Support: Report of Special Subcommittee on Tactical Air Support,* 4865.

[100] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 718.

The Bohn study recommended the Air Force acquire a mix of high- and low-cost aircraft.

This led to a focus on aircraft specialization. The Air Force had not rejected the multirole concept, but the mixed method offered a more economical way to strengthen the tactical force, since the expense of the advanced multirole fighters argued against a large inventory.[101] Secretary of the Defense Schlesinger concurred with the high-low mix, agreeing that it provided the proper sophistication and quantity.[102] Newly appointed Chief of Staff of the Air Force, General David C. Brown stated, "High-low mix and mission optimization go hand in hand. It results in significant cost savings when compared to the costs to develop, procure, and operate a force composed entirely of multipurpose aircraft."[103] Lt General Otto J. Glasser, Air Force Systems Command commander observed, "We have learned through our F-111 experience…that aircraft built for too many purposes, that is too much of a multipurpose airplane is not a good thing. In many cases single purpose airplanes are best, and if an aircraft is to be built for more than one purpose, the purposes should be closely related."[104] These events helped set the groundwork for how the Air Force addressed the crises of the interwar years.

The appearance of modern Soviet aircraft and surface-to-air systems occurred as early as the mid-1960s. At the time a belief was circulating within the Department of Defense that the role of air combat was coming to a close. After confronting older MiGs in Vietnam and experiencing poor results with current American aircraft, the Air Force sought to dismantle this idea. The threat was increasing, not decreasing, based on the kill ratios from the Korean War to the Vietnam War. According to the Red Baron study, the United States had a 10-to-1 air-to-air kill rate in Korea but only a 2.5-to-1 rate in Vietnam. Evidence that Soviet tactical capabilities were increasing and the experience of Vietnam helped establish the Air Force's most-dangerous scenario, the inability to gain air superiority over the European battlefield. The Air Force was developing the F-X tactical fighter and foresaw it as the solution to counter this threat. By the early 1970s, the aircraft was facing significant scrutiny due to cost overruns.

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[101] Jacob Neufeld, *The F-15 Eagle: Origins and Development 1964-1972* (Washington, D.C.: Office of Air Force History, November 1974), 9.
[102] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 493.
[103] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 493.
[104] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 503.

The post-war period was littered with the combination of dwindling budgets; oversight into procurement processes, and Soviet advancements triggered a crisis for the Air Force. The Air Force had to find a way to respond while maintaining its counter to its most-dangerous scenario. The answer was to develop a lightweight fighter. General Jones, Chief of Staff, commented, " If fiscal constraints were not a driving factor in planning our fighter force, we would deploy the F-15 in sufficient numbers. However, …current plans include development and procurement of the less sophisticated, lower cost F-16 which will complement the F-15 in performing the air superiority role."[105]

The F-16 was designated as an "air combat fighter." According to prominent designer Pierre Sprey, the true intent behind the design was to be an alternative to the F-15 air combat fighter. He proposed that the F-16 (previously labeled F-XX) was meant be a low-cost solution to the air-superiority issue.[106] Although this was the reason for its inception, the crises triggered by multiple congressional hearings on CAS and budget constraints led the Air Force to label the F-16 as both air-to-air and air-to-ground capable. With the scrutiny over the expensive F-15s, which prevented the Air Force from purchasing a significant number, the F-16 also eliminated the risk of losing F-15s to a ground-support role.[107] As a lightweight, relatively inexpensive replacement to the aging F-4, the F-16 was proposed to augment the F-15, F-111 and A-10. The F-16 was marketed as a highly capable air-to-air platform capable of performing an element of the air-to-ground role. During its testing, the F-16 exhibited ability in both arenas, outperforming current platforms in counterair and interdiction exercises. General Jones remarked, "[The F-16] is not as survivable as the A-10 in the close air support environment; so we don't say the F-16 is principally a close-support plane. It is a multi-mission, reasonably priced addition to our force."[108] The success of the F-16 reinvigorated the belief in multirole platforms.

The decision to procure the F-16 helped to foster cooperation between the Air Force and the Army during the early days of the interwar period. The Army was in the process of transitioning from "active defense" to "extended battlefield" when the F-16

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[105] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 503.
[106] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 503.
[107] Schlight, *Help From Above,* 383.
[108] Futrell, *Idea, Concepts, Doctrine: 1961-1984*, II: 503.

was coming off the production line in 1978. One major transition between concepts was that the Army had stretched out the dimensions of the battlefield, which now brought the areas where the Air Force was conducting interdiction strikes into the operational vision of the Army. The F-16 satisfied the Air Force and Army's most-dangerous scenarios, the air-to-air fight and the advancing Soviet forces (mainly the second echelon). This opened up a mutually dependent relationship between the Air Force and Army, although the weight of dependence rested more heavily on the Army. In the next several years the Air Force and Army would sign a memorandum on apportionment, agree to a newly defined BAI element of the battle space and incorporate it in the doctrine manuals, and attend inter-service speaking engagements.[109] These events demonstrated Svedin's indications of cooperation through making agreements, expressing verbal approval, and providing opportunities to interact.

During this same period, the Air Force had developed the first-ever American CAS-specific aircraft the A-10. The initiative of building a CAS platform in the 1960s along with the Johnson-McConnell Agreement helped to break the Air Force and Army's cycle of competition on roles and missions. There was a feeling within the Army that the Air Force had provided tangible proof of its commitment to the ground forces. "From the Army's point of view, fielding the A-10 not only underscored the Air Force's commitment to the CAS mission, it also created a corpus of pilots whose whole professional being centered around providing that support."[110] The act of yielding to the Army's needs and making agreements based on its desired CAS performance capabilities fostered a cooperative relationship. Willingness to cooperate was partially driven by the fear of another effort by the Army at attempting to acquire Air Force missions. "When General Creech became TAC commander he feared that unless TAC demonstrated its commitment to close air support the Army would take over the mission, depriving TAC of many of its tactical aircraft and possibly its *raison d'etre*."[111]

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[109] Terrance J. McCaffrey III, *What Happened to Battlefield Air Interdiction? Army and Air Force Battlefield Doctrine from Pre-Desert Storm to 2001* (Maxwell Air Force Base, AL: Air University Press, 2004), 21-22.
[110] Winton, "An Ambivalent Partnership.", 409.
[111] John Andreas Olsen, *John Warden and the Renaissance of American Air Power* (Washington, D.C.: Potomac Books, Inc., 2007), 103.

At the beginning of the 1970s, the Army had cancelled the over-priced Cheyenne armed helicopter, but was able to begin procurement on a lightweight armed helicopter, the AH-64 Apache. This was a long-anticipated effort for the Army to acquire an organic asset capable of doing CAS and conducting strikes in the extended battlefield. The Army still contended the Air Force was primarily responsible for the CAS mission, but the helicopter provided additional firepower in a highly dense, dynamic threat environment. The helicopter was purchased in 1984 and expected to become operational by 1986. In 1982, knowing the Army had just tested the prototype for the Apache, the Air Force Chief of Staff, General Lew Allen, informed Congress the Air Force's dedicated CAS platform was a great aircraft, but the force requirements had been met and the new Fighter Tactical Roadmap did not ask for more.[112] In 1984, shortly after the last of the 713 A-10s were delivered, the Air Force conducted a study and publicized *Close Air Support Investigation*, to explore potential replacements. During this same timeframe the Air Force and Army had signed a memorandum acknowledging the AirLand Battle concept. There was a mutual focus on the interdiction mission, given the crisis each faced with the Soviet follow-forces threat and the most-dangerous scenarios. After years of fiscal plenty, the mid-1980s brought in the budget crisis, and in an attempt to maximize its resources, the Air Force proposed modifying and purchasing more F-16s instead of procuring another CAS-only platform to replace the A-10. Senior leaders believed the F-16 had proven its effectiveness in both the air-to-air role and in an interdiction role. The belief was that with slight modifications it would be a good substitute for a CAS-dedicated platform.[113] A Congressional Report documenting the arguments for developing the A-16 highlights this thinking. The report reads, "The A-10 was developed specifically to perform the close air support mission, although the Air Force considers any aircraft that is capable of delivering air-to-surface weapons as CAS capable."[114] Air Force officials believed that, based on the Army's description of its

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[112] Campbell, *The Warthog*, 136.
[113] Campbell, *The Warthog*, 136.
[114] Harry R. Finley, *Close Air Support: Status of the Air Force's Efforts to Replace the A-10 Aircraft*, Report to the Chairman, Committee on Armed Services, House of Representatives (Washington, D.C.: U.S. General Accounting Office: National Security and International Affairs Division, September 1988), 9.

tactical air support requirements, an "aircraft performing CAS in the future would have the characteristics of air interdiction aircraft."[115] Modifications to the F-16 as a replacement to the A-10 were not contentious for the Army because it desired to have an aircraft that could respond quickly to both CAS and BAI targets. The report amplified this by pointing out, "The Army and Air Force foresee close air support and BAI becoming similar in the future from a timing and coordination standpoint. As with CAS, they believe BAI will require detailed coordination and a more immediate response to identified targets, thus the Air Force sees a need for a more flexible aircraft to meet this requirement."[116] The Air Force and Army coordinated and cooperated on this effort because the A-16 would be a valid solution to the most-dangerous scenarios. With a similar vision on the future conflict and an amicable relationship, the Services were operating within the same implemental mindset. This situation is reminiscent of the Air Force and Army pre-Korea, when the Army supported the Air Force B-36 bomber procurement, even as the Navy was critiquing the impact it would have on tactical aircraft. It was also helpful in this situation that the Army was in the process of acquiring the AH-64s, offering somewhat of resource abundance in the CAS role. Given these conditions, the Services had prime conditions for cooperation and united their efforts to satisfy their perceived roles.

Summary

The Air Force and Army, who seemingly are set up to have a contentious relationship as each vie for control of tactical air, appeared to find a way to develop a cooperative relationship for nearly two decades. A primary condition that facilitated this rapport was a closely aligned view of the future battlefield that necessitated a combined-arms approach. From this foundation it was easy to create organizational structures, such as ALFA, and training events, such as Green Flag, to hone and improve the coordination and cooperation. The crises that occurred during this period were fairly mild compared

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[115] Ibid Finley, *Close Air Support*, 15.

[116] Harry R. Finley, *Close Air Support: Status of the Air Force's Efforts to Replace the A-10 Aircraft*, Report to the Chairman, Committee on Armed Services, House of Representatives (Washington, D.C.: U.S. General Accounting Office: National Security and International Affairs Division, September 1988), 3.

to previous interwar years. The Soviet threat persisted but remained relatively consistent, since its primary changes occurred in the conventional tactical forces without large technological leaps. The budget deviations were not dramatic and did not require large cuts in force structure. The combination of these conditions set the stage for a nearly textbook example of inter-service cooperation.

Is it possible the abundance of teamwork was aided by the CAS mission being relegated to the background? During the course of all this apparent cooperation, in reality the Services were operating in parallel, but distinct, lanes. The European theater allowed each Service to have an area of operation unique to its role and purpose, with minimal coordination. The Air Force, responsible for counterair, would have priority in the opening stages of the conflict to ensure air superiority. After that had been achieved, it would allocate resources to interdiction, which required little to no deconfliction with Army maneuvers or fires. The Army, along with its attack aviation, would focus on operations short of the fire support coordination line. Although air strikes would occur in this battlespace, it placed the Air Force in a position of support, requiring detailed coordination of aircraft strikes with the Army's objectives. Attention to the one area of overlap on the battlefield, CAS, was reflected in the A-10 CAS-dedicated platform but even that became dispensable as each Service gravitated toward its area of operation. The creation of BAI also reflected the desire to avoid conflict by devising a buffer between Air Force and Army operations. As time went on throughout the interwar years, both the Air Force and the Army did not expect the CAS mission to have a large presence in the most-dangerous scenarios; and when it did emerge, it would do so only briefly. It is possible to argue the reason the Air Force and Army had such a good relationship during this interwar period is because they put off wrestling over CAS and the fight for its control and resources. Despite the fact cooperation did occur, it did not strengthen the Services joint mission areas. Instead these missions were left somewhat dormant while each Service focused on operating in a demarcated battle space. On the surface, the Services were operating jointly; but much like the bones of a body, under enough pressure they could easily be pulled apart, fracturing the relationship and impeding the mission.

CAS in Desert Storm

On August 2, 1990 Saddam Hussein rolled over the Kuwaiti border in a classic armored assault with three armored divisions, spearheaded by Soviet T-72 tanks.[117] Shortly after the conclusion of the Iraqi and Iran war, there were concerns Iraq's victory had elevated its regional status to a point where it would be moved to gain control over regional resources. Despite Saddam's verbal threat to enter Kuwait just months prior to the invasion, this act of aggression caught the United States off guard. The attack on Kuwait was viewed as the initial step in Saddam's push to obtain control of the oil fields in Saudi Arabia. The United States and international community responded immediately; and within a week Operation Desert Shield began with the rapid deployment of tanker and transport aircraft ferrying troops, equipment, fighters, and bombers thousands of miles towards the Middle East sandbox. The Iraqi military, considered the fourth largest in the world, presented a formidable foe for the United States. For the Coalition forces, "The greatest challenge was the seizing of air superiority, for that meant the destruction of the Iraqi air force's fighters and interceptors, suppression of SAM and AAA sites, and the jamming and destruction of Iraq's Franco-Soviet-British-based air defense network."[118] In projecting for the opening hour, the Iraqi military would present the Coalition air forces with over 700 aircraft and over 23,000 antiaircraft guns and missiles.[119] Counter to popular predictions, the United States exited the interwar years without facing the military forces of the Warsaw Pact and Soviet Union; however, armed with Soviet equipment and tactics, the Iraqis did present a very similar scenario. The approaching war offered the Services a prime opportunity to test theater counterair operations, interdiction, and mass ground maneuvers.

Operation Desert Storm was the one conflict that very closely aligned with the most-dangerous scenarios of the interwar period. It has been deemed the perfect war, at the perfect time. The Army faced a sizeable, highly technical, opposing ground force with very capable follow-on forces in the Republican Guard. Gaining air superiority demanded a dense air assault on the sophisticated Iraqi integrated air defense (IAD)

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[117] Hallion, *Storm Over Iraq*, 133.
[118] Hallion, *Storm Over Iraq*, 153
[119] Hallion, *Storm Over Iraq*, 153

network using a coordinated effort of fighter aircraft and sea-based missiles. Similar to the reaction from the international community after witnessing the Yom Kippur War of 1973, Desert Storm demonstrated a new way of warfare. The technologically superior United States, with its precision munitions and space-based capabilities, neutralized an advanced military opponent in less than two months. Airpower featured supersonic, stealth bombers that could drop weapons with near pinpoint accuracy.

The end of the war was met with fanfare and jubilation for the Coalition forces' success in rolling back Saddam and his military from Kuwait in a mere 43 days. Two decades after the humiliating experience in Vietnam, it appeared the United States military had overcome inter-service rivalry, strategic poverty, and political intimidation. For a war with a decisive victory based on years of cooperation and coordination, one would expect the Services to take mutual responsibility for the win. Interestingly, the immediate post-war dialogue gives the public a glimpse into the true synergy of the war. Air Force Chief of Staff General Merrill A. McPeak exclaimed, "This is the first time in history that a field army has been defeated by air power."[120] Air Force historian, Richard P. Hallion, echoed this remark, stating, "Today, air power is the dominant form of military power."[121] The Army's official history of the war, *Certain Victory: The U.S. Army in the Gulf War*, posits the principle lesson of the war: "Maintaining an immediately deployable capability for decisive land combat to end a conventional conflict successfully is the single most enduring imperative of the Gulf War."[122] The report strengthened this argument by using a quote from T.R. Fehrenbach, "You may fly over a land forever; you may bomb it, atomize it, pulverize it, and wipe it clean of life—but if you desire to defend it, protect it, and keep it for civilization, you must do this on the ground, the way the Roman legions did, by putting your young men into the mud."[123] The dichotomous views of the Services reflect the splintered nature of how the war was

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[120] David E. Johnson, *Learning Large Lessons: The Evolving Roles of Ground Power and Air Power in the Post-Cold War Era* (Santa Monica, California: RAND, 2007), 27.
[121] Johnson, *Learning Large Lessons: The Evolving Roles of Ground Power and Air Power in the Post-Cold War Era,* 27.
[122] Johnson, *Learning Large Lessons: The Evolving Roles of Ground Power and Air Power in the Post-Cold War Era,* 25.
[123] Johnson, *Learning Large Lessons: The Evolving Roles of Ground Power and Air Power in the Post-Cold War Era,* 25.

conducted and the true lack of cohesion built throughout the interwar period.

The war was orchestrated sequentially, beginning with an air campaign followed by a ground campaign. Similar to the planning for the European theater, the Air Force and Army roles could be easily segregated. The difference in Desert Storm was instead of just being separated geographically (near versus deep battle), the operations were also separated temporally. This new concept was derived from the operational theory on airpower proposed by Warden. Pulling away from the AirLand Battle concept of deep strikes meant solely to shape the battlefield for the maneuvering ground battle, Warden offered a plan intended to coerce the Iraqi leadership into discontinue fighting altogether. The belief was that air operations could overwhelm and destroy the enemy centers' of gravity and war-making ability to such a degree it would break their will. The initial pitch, Instant Thunder, offered a way of conducting the war with air forces only, significantly reducing the application of land forces. Upon contact with the Joint Force Commander, this option was quickly modified to include the full spectrum of Air Force, Army, Navy, and Marine assets.

The actual execution of Desert Storm did not deviate much from the air and ground campaign plan, which was to be executed in four phases. Phase I was a strategic air campaign, "intended to destroy Iraq's IAD system, gain air superiority over the Iraqi air force, destroy Iraq's strategic offensive capabilities (nuclear, biological and chemical weapons and production facilities and SCUD tactical ballistic missiles, launchers, and production capabilities), and disrupt Iraqi command, control and communications to its armed forces."[124] Phase II focused on suppression of Iraqi air defenses located in Kuwait Theater of Operations (KTO) in order to open up freedom of action so air attacks could be conducted on Iraqi Regular Army and Republican Guards in KTO during Phase III. "The Phase III attacks were meant to isolate the Iraqi army in the KTO, cut it off from its source of resupply and reinforcements, and then reduce it to the level that a ground campaign could be conducted with minimal casualties."[125] Finally, phase IV was the start of ground operations with associated air support. As evident, the war was designed

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[124] Les Aspin, *Interim Report of the Committee on Armed Services, House of Representatives: Persian Gulf* (Washington, D.C.: U.S. House of Representatives Committee on Armed Services, March 30, 1992), 86.
[125] Aspin, *Interim Report: Persian Gulf*, 87.

to initially be air-centric followed by ground-centric if necessary, deconflicting the Services and the air assets in theater.

Phase I of the war began on the night of January 16, 1991. In the opening hours of Desert Storm an ensemble of air and naval forces executed a symphony of strikes across the Iraqi landscape. Aircraft from every American military Service as well as from members of the Allied nations flashed across the night sky. "Altogether, in the first night, 668 aircraft, flying over 1,300 sorties and 106 Tomahawk land attack missiles (TLAM) were launched against Iraq."[126] After achieving overwhelming success in degrading the Iraqi air defense system, air forces were directed to begin Phase III the next morning, striking Iraqi ground forces in the KTO.[127] Approaching the end of January, Coalition air forces had decimated the entire Iraqi air defense system and severely degraded command and control, military infrastructure, and reserve forces and supplies. Some believed the effects of airpower would send the Iraqi leadership directly to the negotiations table, negating the need for a ground offensive and therefore CAS. Despite all of this, CAS did surface in the war.

Saddam knew his window of counterattack was dwindling and attempted to kick start the ground war before his forces were completely depleted. The Iraqi leaders set out to launch multiple attacks into Saudi Arabia, inciting a Coalition response. On January 29, 1991, twelve days after the first air strikes, the Battle of Khajfi ensued, becoming the first use of CAS during the war. The town of Khajfi was a port city in Saudi Arabia that the Iraqis believed had strategic value both for resources but also for political leverage. After the battle began, coalition forces received intelligence that over 60,000 Iraqi troops were mobilizing 35 miles north of the city, and over 1,000 vehicles had crossed into Saudi sovereign territory.[128] Aircraft flying over the area witnessed a 10-mile long Iraqi armored convoy massing in southern Kuwait. The battle ensued when 2,000 Iraqi Third Army troops and several hundred armored vehicles entered the city on the night of the

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[126] Hallion, *Storm Over Iraq*, 165-166.
[127] Thomas A. Keaney and Eliot A. Cohen, *Gulf War Air Power Survey* (Washington, D.C.: United States Government Printing Office, 1993), 12.
[128] Scott Williams, "The Battle of Al-Khafji" (Thesis, Monterey, California: Naval Postgraduate School, 2002) 13, 15.

29th.[129] Caught off guard, the United States Marines spent the next 36 hours repelling a highly capable Iraqi force. The asymmetric advantage for the United States was the air support, however, air forces were not operating in a sanitized environment. An AC-130 supporting the battle was shot down by a surface-to-air missile, killing the fourteen-man crew, "resulting it the single greatest loss of Air Force personnel" in the war.[130] The complex dynamics of this event demonstrated the need for pilots to be skilled in detailed integration within close proximity of friendly forces. Unfortunately, seven Marines lost their lives to friendly fire when a Maverick missile, launched against viable targets, lost its lock and struck the friendlies' vehicle. Fortunately, the combined arms team of air and ground forces was able to repel the Iraqi attack. In total, twenty-five Americans lost their lives over the duration of the battle.[131] Saddam's attempt to win a strategic success had failed. This one battle may not stand out within the immense tapestry of the war, but that is most likely because it fell in favor of the Coalition forces. Air power, through the execution of detailed integration in close proximity to ground forces (CAS), helped preserve the strategic advantage necessary for eventual defeat of the Iraq forces.

Coalition forces entered Phase III much earlier in the war than expected. During this phase, the objective was to achieve 50 percent destruction of Iraqi tanks, armored personnel carriers, and artillery.[132] One of the keys to achieving success in Phase III was to hold the ground forces in Saudi Arabia. This restraint along with achieving almost complete air superiority allowed the air forces unhindered freedom to employ airpower against what the Joint Force Air Component Commander (JFACC) deemed priority targets. The JFACC, who controlled allocation of all the air assets, designed a killbox structure to geographically deconflict and manage strikes. This construct was designed to allow strike aircraft to be controlled by Forward Air Controller-Airborne (FAC-A) aircraft, independently of any coordination with ground forces based on the placement of the Fire Support Coordination Line (FSCL). These were the prime conditions for air

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[129] Williams, "The Battle of Al-Khafji", 22.
[130] Keaney and Cohen, *Gulf War Air Power Survey*, 20.
[131] Paul W. Westermeyer, *The Battle of Al-Khajfi* (Washington, D.C.: Marine Corps History Office, 2008), 31.
[132] James A. Winnefeld, Preston Niblack, and Dana J. Johnson, *A League of Airmen: U.S. Air Power in the Gulf War* (Santa Monica, California: RAND, 1994), 169.

interdiction and the air forces took full advantage of it. It was during this period the air forces conducted "tank-plinking" and SCUD-hunting operations. According to the Gulf War Air Power Survey, "by the end of the war, the Iraqi Army had suffered approximately seventy-six percent attrition in tanks, fifty-five percent in armored personnel carriers, and ninety percent in artillery."[133]

Unfortunately, an overzealousness to find targets and decimate the Iraqi forces led to what was considered one of the war's tragedies, the "Highway of Death". Highway 80, a six-lane road that stretches from Kuwait to Iraq became a shooting range for strike aircraft. One reporter captured the destruction saying, "For a fifty- or sixty-mile stretch from just north of Jahra to the Iraqi border, the road was littered with exploded and roasted vehicles, charred and blown-up bodies…thick with the wreckages of tanks, armored personnel carriers, 155-mm. howitzers and supply trucks."[134] Images from this had direct impact on termination of the war and the credibility of the Coalition forces, which, according to some critics, used their technological superiority void of proportionality.

As targets began to dwindle during Phase III operations, there was anxious anticipation for the ground campaign to begin. With all the success the air campaign engendered, it is at this point in the war that conflict between the air and ground forces began to resurface. As previously mentioned the JFACC controlled distribution of air assets throughout the theater of operations. He executed this authority through the air tasking order (ATO). Tensions arose because "the ATO supported an air campaign that was, in the view of many Army, Navy, and Marine Corps officers, an Air Force-dominated process that reflected Air Force conceptions about the appropriate use of air power."[135] The other Services critiqued the JFACC for not responding to their requirements. The Army and Marine Corps commanders believed the ATO process was "cumbersome and unresponsive" and "targets they wanted to hit were being ignored."[136]

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[133] Keaney and Cohen, *Gulf War Air Power Survey*, 106.
[134] Hallion, *Storm Over Iraq*, 235.
[135] Johnson, *Learning Large Lessons: The Evolving Roles of Ground Power and Air Power in the Post-Cold War Era*, 35.
[136] Johnson, *Learning Large Lessons: The Evolving Roles of Ground Power and Air Power in the Post-Cold War Era, 35*.

Although it was cataloged that there were over 4,300 CAS sorties out of a total of 112, 235 sorties flown in Desert Storm, this number is deceiving since the majority of CAS missions were rerolled to interdiction missions.[137] An air interdiction mission in the concept of operations was defined as "a mission that did not require coordination with ground forces because it was flown on the far side of the Fire Support Coordination Line (FSCL)."[138]

The FSCL was initially placed on the Saudi Arabian border since the ground forces would stay in place during Phase I through III. Beyond the FSCL the JFACC controlled all the air assets. The Army viewed the area beyond the FSCL as permissive, meaning it, "allows the [Army] and its subordinate and supporting units (such as the Air Force) to expeditiously attack targets of opportunity."[139] Because the JFACC was operating on a 72-hour ATO cycle conducting air interdiction missions and had an overabundance of air assets, even after repeated requests the Army's attack aviation was not included in the planning cycle. Therefore, the Army was unable to execute its deep battle attacks it had trained and coordinated with the Air Force to fly during the European theater scenario. During the initial phases of the war this was not a significant issue because the Iraqi Army was static and dug-in, preventing the need for the Army to engage in close support. Also the majority of aircraft went to interdiction targets and was rarely allocated to support surface forces, even CAS-designated missions were being rerolled to interdiction missions. Army commander, General Creighton Abrams noted, "[the Army] kept the FSCL on the [Saudi Arabian border] because the Air Force refused to fly short of it before G-day."[140] A high level of tensions persisted and the perception from the ground forces was the Air Force was not just avoiding the area from the Forward Line of Own Troops (FLOT) to the FSCL because it required detailed integration to coordinate fires, but it was resistant to the CAS mission. On one occasion, a special operations division was operating 80 miles north of the FSCL when it requested

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[137] Peter A. Costello III, "A Matter of Trust: Close Air Support Apportionment and Allocation for Operational Level Effects" (Thesis, Maxwell Air Force Base, AL: Air University, 1995), 55.
[138] McCaffrey III, *What Happened to Battlefield Air Interdiction?,* 41.
[139] Johnson, *Learning Large Lessons: The Evolving Roles of Ground Power and Air Power in the Post-Cold War Era,* 55.
[140] McCaffrey III, *What Happened to Battlefield Air Interdiction?,* 41.

CAS. The request was turned down because the unit was north of the FSCL but could resubmit the request for interdiction and just pass the target information.[141]

The Army decided to take matters into its own hands after waiting for a month for the JFACC to focus on interdiction targets, inhibit the inclusion of Army aviation during the air campaign, and fail to supply responsive support to the ground commanders' needs. At the beginning of the ground campaign, the Army decided to push the FSCL out over 100 miles, covering the entire KTO. The Gulf War Air Power Survey reports, "To avoid JFACC control, XVIII Airborne Corps advanced the FSCL well north of the Euphrates River on 27 February and thus reserved an area for attack helicopter operations unconstrained by the requirement to coordinate with the JFACC."[142] The lack of available FACs (both air and ground) inhibited the use of airpower north of the river based on the rules of engagement requiring aircraft to be under qualified control to employ weapons inside the FSCL. This created a seam between air forces and Army firepower where a multitude of Iraqi ground forces were able to find sanctuary. After the cease-fire, US intelligence found 600-700 tanks of the Hammurabi and Medina divisions still intact and secure in the sanctuary."[143] The outcome of the war did not hinge on the destruction of these Iraqi forces, the enemy was defeated by the combined efforts of a successful air campaign and a surprise "left hook" ground maneuver. There were, however, ramifications for spending the interwar period building a relationship on superficial cooperation designed to allow the Air Force and Army to operate under the mantra of "to each his own". When conflict comes, joint operations or areas of overlapping battle space, are the most sensitive to the stressors of war. Without true synergy or cohesion, joint mission areas are the first to develop cracks, and in the human condition, those cracks are construed as an erosion of trust, affecting the fight as well as having a lasting effect on the next iteration of interwar years.

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141 McCaffrey III, *What Happened to Battlefield Air Interdiction?*, 42.
142 Keaney and Cohen, *Gulf War Air Power Survey*, 157.
143 Costello, "A Matter of Trust", 53.

Chapter 7

Implications and Conclusions

A military is defined by its action on the field of battle. Its character is determined in how it trains and thinks in peacetime.

- Ingo Trauschweizer

The purpose of this paper was to examine how designing a force for the most-dangerous scenario affects the Air Force's relationship with the Army and its ability to conduct joint missions, specifically close air support. To accomplish this task three interwar year case studies were analyzed through the lens of theory. The theory proposed that Services build their most-dangerous scenario in response to the nation's highest threat. The most-dangerous scenario then becomes the lens through which the Service views its purpose and its adversaries, both domestically and internationally. When crises arise, challenging the Service's role and/or most-dangerous scenario and presenting a level of uncertainty and a threat to basic values, it typically necessitates an urgent response. In turn the Service enters into an implemental mindset, where it becomes intellectually entrenched in the most-dangerous scenario, unable to accept or consider alternative views or actions. The nature of the relationship and the degree of difference in most-dangerous scenarios between the Air Force and the other Services affects its ability to cooperate in joint-mission areas, specifically CAS.

As expected, the theory was unable to fully explain the complex relationship between the Air Force and the Army regarding CAS. However, true to its purpose, the theory did help to illuminate and provide a framework to examine the relationship and what facilitates cooperation or drives the Services to conflict. In all three case studies, the most dangerous threat to national security remained the same, the Soviet Union. This provides a degree of consistency, but can also be seen as a limitation, and it would benefit this study to expand the case studies beyond the Cold War. For the case studies that were chosen, although the threat remained consistent, the strategic landscape shifted dramatically between 1945 through 1991. This leads to one of the first main conclusions from this study. The Air Force was more likely to base the most-dangerous scenario on the tangible capabilities of the national threat, whereas the Army was more likely to

design its most-dangerous scenario on the national policy developed to combat the threat. In the pre-Korea period, the national policy was containment of the Soviet Union and communist ideology. The means to accomplish this was atomic diplomacy: the threat or use of atomic strikes to halt Soviet aggression. Uniquely, this policy mirrored the Air Force's desired response, strategic nuclear bombing of Soviet war-making capacity. The Army recognized it was just an occupational force in Europe and was dependent on the Air Force executing the national response. During these interwar years, the Army and Air Force were closely aligned in their view because of the similarity between the capability and policy available to respond to the most dangerous threat.

Moving through the pre-Vietnam period, a split began to occur between the two Services' visions of the future way of war and the appropriate response to deterring the most dangerous threat. The Air Force's strategic nuclear attack response was directly aligned with President Eisenhower's mutually assured destruction policy, and remained the dominant course through the decade. The Army, on the other hand, began to question its relevance and found maneuver room in Eisenhower's dual-legged policy. His New Look policy had a "twofold requirement – preparedness for the essential initial tasks in case a general war should be forced upon us, and maintenance of the capability to cope with lesser hostile actions."[1] The Army took the latter policy component and devised a method of providing a flexible response by incorporating tactical nuclear weapons into its planning. The chasm between the visions of the future of warfare was stark.

Returning home from a harrowing experience in Vietnam, the Services entered the interwar period prior to Desert Storm with a humble slate. The national policy had shifted to flexible response with conventional means under the nuclear deterrent umbrella. Still able to accommodate the deterrent role, the Air Force oriented its most dangerous scenario to the new highly technical capabilities of its opponent, the Soviet Union. The Army, sitting across the fence in Central Europe from the overwhelming number of Soviet armored vehicles and mechanized conventional forces aligned its most-dangerous scenario to the policy of conventional deterrence. Although the semantics of national policy appeared to fluctuate with new administrations, the overarching response remained consistent, American and NATO forces would meet the Soviets with a

[1] Futrell, *Ideas, Concepts, Doctrine*, 425.

conventional force to hold off invasion of Western Europe. Based on the strategic landscape, the threat of initial nuclear aggression began to decrease, elevating the likely use of conventional force instead. Once again, since policy appeared to align with the Air Force's vision on what means would be necessary to combat the national threat, the Services were heading toward a complementary most-dangerous scenario, albeit with different responses.

Stepping beyond the analysis of what the Services use to design the most-dangerous scenario, it is worth exploring why. The simple answer as to why the Services gravitate to their most-dangerous scenarios may be the most satisfactory – it is because of fear. The Air Force gained its independence by being able to offer unique and devastating capabilities based on technological advantage over its opponent. The measurement of success for the Air Force was this "silver bullet" to solve the problem of war. Therefore, fear of losing this foundational purpose and being relegated to a secondary or tertiary Service drove the Air Force to identify its most-dangerous scenario based on out-performing the opponents' technical capabilities to overwhelming affect the calculations of war. The Army, on the other hand, was deeply rooted in military history, with an unshakable presence. The rapid explosion of airpower technology and weapons of mass destruction shook the relevance of the Army. Both Services had a penchant for fearing the supporting role, which drove the pursuit of a scenario that displayed the unique capabilities each brought to the fight. Unlike the Air Force, the Army did recognize its dependence on the Air Force to accomplish its mission, however, for that reason it also believed it deserved to be the priority. Both Services were reluctant to see the future security environment through a joint-scenario lens, where mutual interdependence was preeminent.

The second conclusion drawn from the three case studies is that by the nature of their environments, the Services were in a perpetual state of crisis, reacting to uncertain external stimuli, pushing them to operate in an implemental mindset. Repetitively, the Air Force was responding to crises such as budget cuts, increases in the opponent's capability, changing administrations, and attacks from the other Services. The stress induced by these events threatened the Service's purpose and role in combating the most-dangerous scenario, placing the Service on guard against incoming adversaries, such as

Congress, Secretary of Defense, Service Chiefs, coalition partners, or opposing militaries. These perceived adversaries could shift on a daily basis depending on the angle from which they approached or the weapon in hand to include resources, regulations, right-of-way, or regional aggression. In the implemental mindset the Service is so focused on the crisis and its impact to its role in the most-dangerous scenario. This is reflective of spending all the time running around stamping out ants instead of looking for the colony. A tunnel vision develops, impacting strategic thought and relationships to those offering viable solutions.

The third conclusion to take from this analysis resonates in a recent adage, "you cannot surge trust."[2] Willful and deliberate cooperation is all based on trust. Trust is the sinew that holds joint relationships together; without it the pressures of significant crises and even war can bend or break those relationships. The interwar years matter, not only to build and reconstitute the hardware necessary to fight, but to solidify the relationships vital to preserving American lives and national treasure when it comes time to fight. Evidence from the three case studies demonstrates how becoming Service-centric, focusing intently on individual scenarios, reduces the level of trust between the Services, specifically with regard to the CAS mission. It also becomes apparent that trust is not solidified through words alone, actions must follow or future words are perceived with suspicion and complete mistrust. "Between 1950 and 1990, the Air Force produced 15,600 fighter aircraft. Only 707 were designed for CAS. This is a true measure of priority."[3] Trust is currency, and each Services has a running account. These accounts are not replenished at the start of each conflict, with the notion that the crisis of war will overcome previous grievances. At times the Services may hold another's debt, but the balance is not forgotten and will be repaid in the next round of interwar years, if not sooner.

The fourth conclusion is that pursuing the most-dangerous path religiously in the interwar years ultimately severs the joint relationships knitted together in wartime. There is a needed responsibility to take account of the most-dangerous scenario and hedge

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[2] Richard Rubright et al., *The Role of the Global SOF Network in a Resource Constrained Environment* (McDill Air Force Base, Florida: The JSOU Press, 2013), 10.
[3] James G. Burton, *The Pentagon Wars: Reformers Challenge the Old Guard* (Annapolis, Maryland: Naval Institute Press, 1993).

against that potential scenario. But it comes at a cost when the Service's entire portfolio of capabilities is oriented solely toward this scenario. This concentrated focus results in making the most-dangerous scenario the essence of a Service. When the Service embodies the most-dangerous scenario as the sole threat and cloaks itself with the assumptions and characteristics of that fight, it begins to prepare for a theoretical war, devoid of the restraining factors of politics and public opinion. Perfecting an Air Force for the most dangerous scenario, exclusive of the entire strategic landscape and combined efforts of the joint force, results in a hunt for the elusive white rabbit.

There are some implications noted from this paper that reach far beyond just the CAS mission. One implication is that the Services have not taken the lessons of history forward, but are attempting to apply the analogies of history as solutions. The case studies in this work are not all-inclusive but attempt to offer insight for the ensuing interwar years. Each of the interwar periods offer analogous circumstances to what the Services are currently contending with. Today, the Department of Defense is facing significant budget cuts, similar to each of the interwar periods. In the interwar years between WWII and Korea, the United States held a monopoly on atomic weapons. Today, the United States holds a monopoly on air and space forces, but with nations gaining momentum in these two areas. Akin to the years between Korea and Vietnam, when the Services were expanding into the missile business, the Services are now becoming programmed to fight in cyberspace. Similar to the years leading up to Desert Storm, today, the American people are war weary and there is a concerted effort to shift to small operations. There was also a major effort to outsource security through partnerships. Senior leaders can easily fall into a death spiral when trying to come up with solutions to these complex conditions. They might be tempted by efforts to simplify the problem, consistent with the conditioning of a 50-year peer rivalry with the Soviet Union; the trap is to reduce the threat to one most-dangerous scenario. Under this dynamic the Services will continue to modify their most-dangerous scenario isolated from the larger picture in order to place a marker in the distance for the ideal force structure. The scenario becomes more and more theoretical as the complexities of the environment increase, and in the drive to meet this threat the mission sets, platforms,

personnel, and relationships that don't conform to this force structure will be chiseled away.

There has to be a balance between the ultimate military scenario and reality, which includes the willingness of political leaders for the United States and allies as well as the opponent. Permeating the case studies is evidence of moderating features; one being the political structure and the other being the public audience. The interesting thing about the current environment versus the Cold War landscape is that there is an explosion in the variety of the political and public moderating structures. In the Cold War, the distinct moderating elements fell into one of two primary camps, either communist or Western (communist leadership, communist supporters, Western leadership, and Western public). Today there are numerous political ideologies and a vast array of public audiences that are even at times disconnected from a political system, especially with the rise of globalization and social media. The uncertainty of this dynamic may be overwhelming, but it assumes a higher degree of moderating the excessive use of force in the international system. There has been reluctance for other nations to directly engage states capable of delivering the devastating power of the mass application of precision munitions along the "Highway of Death" as was demonstrated in Desert Storm. In this post-Cold War information age, moderate and well timed uses of violence for political statement has become the norm. Terrorism has grown into a real political threat.

Another implication is that the military as an organization has absorbed some critiques of being overly bureaucratic, slow to innovate, and rigid in its ideology. Many times this criticism comes from without, but on occasion it comes from within. When General David C. Jones retired as Chairman of the Joint Chiefs of Staff he said, "Historically our military organization has tended to lag behind the changing demands of the defense environment."[4] He argues that the United States' military successes have come not from being prepared to fight the wars, but because the nation was able to and had the time to mobilize the forces necessary to wear down the enemy. The United

[4] Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force 1961-1984*, vol. II, II vols. (Maxwell Air Force Base, AL: Air University Press, 1989), 583.

States' smaller industrial base and the new character of conflict may not afford the nation these luxuries. It is paramount the Services and the political leaders, as a joint team, are doing the hard mental gymnastics now to prepare for first contact with the enemy, who may indeed present himself as the sum of all fears.

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